



3 1761 11726279 0

Government
Publications

Government
Publications



Digitized by the Internet Archive
in 2023 with funding from
University of Toronto

<https://archive.org/details/31761117262790>



Canada

1345

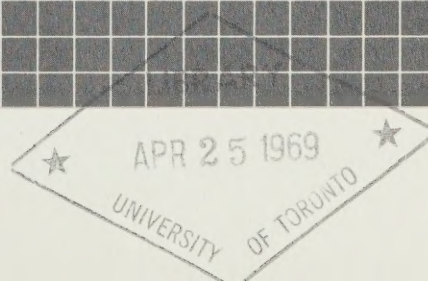
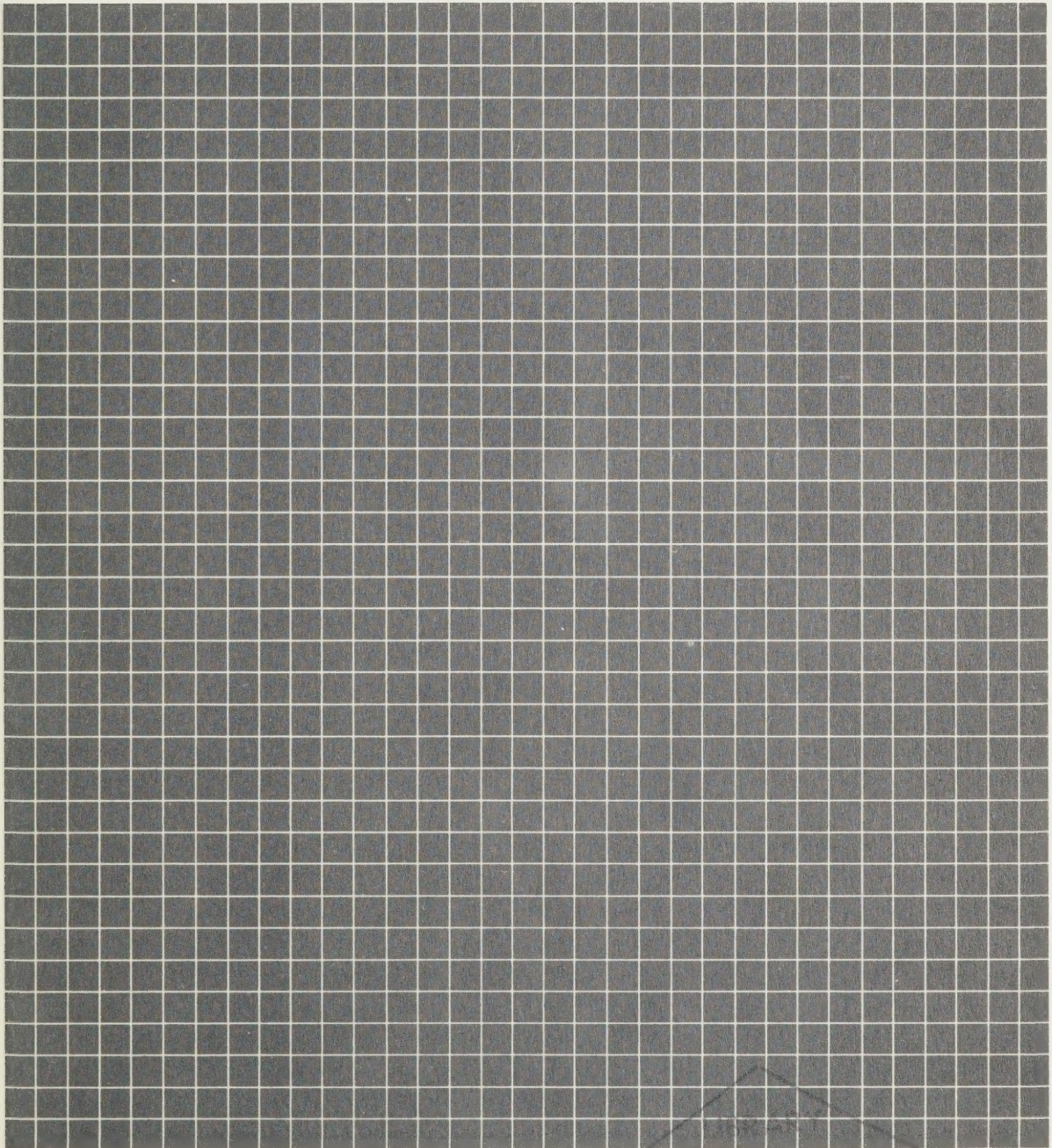
27

Dominion Bureau of Statistics

1966/76

Annual Report

For the Fiscal Year ended March 31, 1967



CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS
FOR THE FISCAL YEAR
ENDED MARCH 31, 1967

March 1968
0001-502

THE HONOURABLE ROBERT H. WINTERS, P.C.,
MINISTER OF TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the
Dominion Bureau of Statistics covering the operations and
services rendered during the fiscal year ended March 31, 1967.

Respectfully submitted,

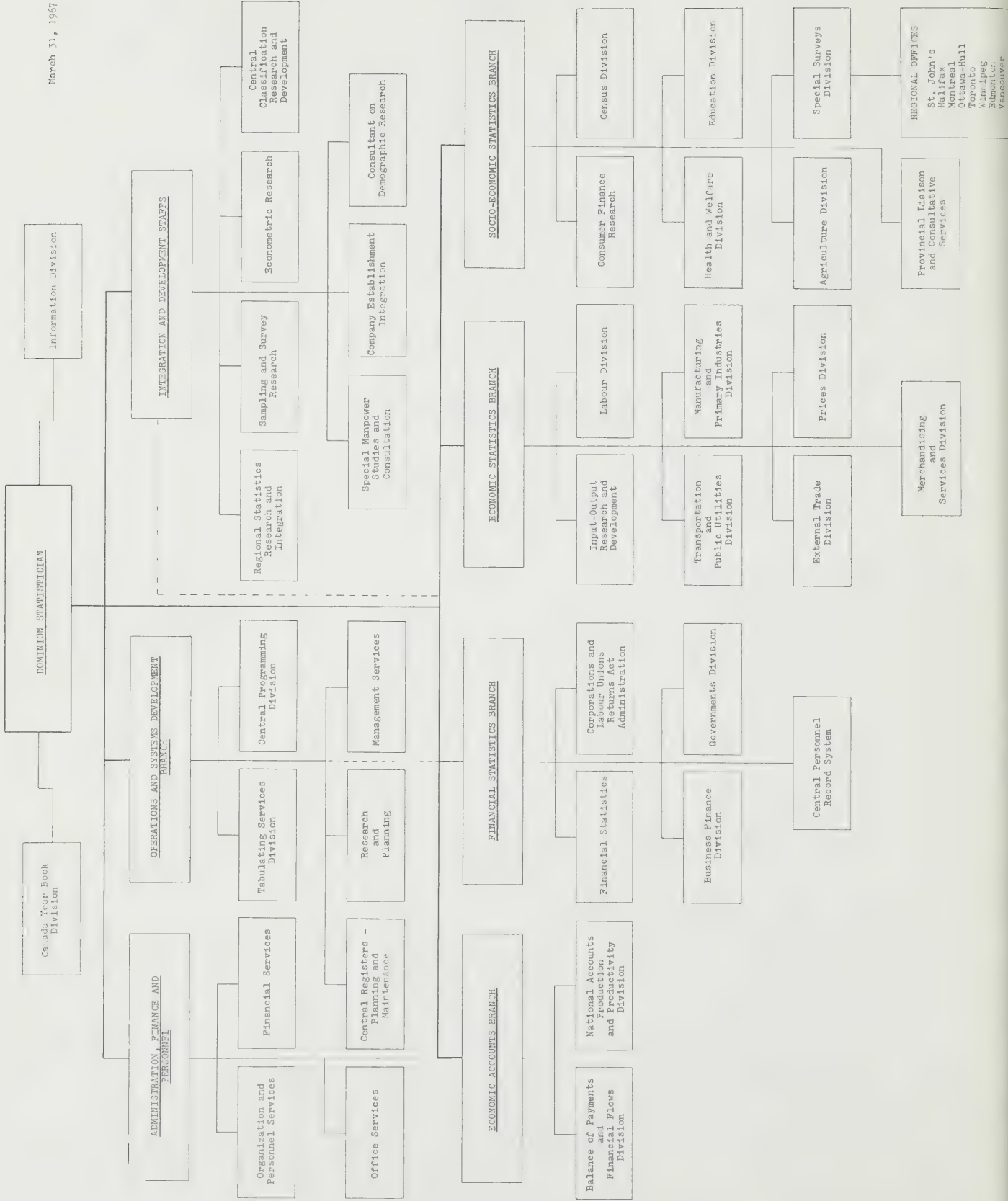
Maeter E. Duffett

Dominion Statistician.

Ottawa, Canada
March, 1968.

CONTENTS

	<u>Page</u>
Chart of the DBS Organization	6
General Activities	7
Canada Year Book Division	8
Information Division	9
Integration and Development Staffs	
Central Classifications, Research and Development	10
Sampling and Survey Research	11
Econometric Research	12
Regional Statistics, Research and Integration	13
Company Establishment Integration	13
Special Manpower Studies and Consultation	13
Consultant on Demographic Research	13
Economic Accounts Branch	
Balance of Payments and Financial Flows Division	14
National Accounts, Production and Productivity Division	15
Financial Statistics Branch	
Business Finance Division	16
Corporations and Labour Unions Returns Act Division	17
Central Personnel Record System	18
Governments Division	18
Economic Statistics Branch	
External Trade Division	20
Input-Output Research and Development	20
Labour Division	21
Manufacturing and Primary Industries Division	22
Merchandising and Services Division	24
Prices Division	25
Transportation and Public Utilities Division	26
Socio-Economic Statistics Branch	
Agriculture Division	28
Census Division	31
Consumer Finance Research	31
Education Division	32
Health and Welfare Division	34
Special Surveys Division	37
Provincial Liaison and Consultative Services	37
Operations and Systems Development Branch	
Tabulating Services Division	38
Central Programming Division	39
Management Services Section	39
Central Registers Section	39
Administrative Services	
Staff Organization	40
Staff Development and Training	40
Incentive Awards	41
Financial Services	41
Office Services	41
Dominion Bureau of Statistics Senior Officers	42



GENERAL ACTIVITIES

In recent years the Dominion Bureau of Statistics has been experiencing a period of rapid growth, in an attempt to catch up with the urgent demands for additional statistical data. Many of these demands have resulted from newly created federal government departments and agencies charged with the implementing of important and far-reaching government programs. Provincial government needs for statistical data, too, have been increasing, particularly in the field of regional development. During the fiscal year the establishment of the Bureau increased by about 300 positions, including the acquisition of staff for certain functions on behalf of other government departments. Pressure for additional statistical services was reflected at the year-end in plans for further increases in 1968-69.

On January 1, 1967 an important series of changes took place in the organizational structure of the Bureau. The previous arrangement, with a large number of divisions reporting directly to the Dominion Statistician, had become inappropriate with the increasing size and complexity of the organization, and consideration had been given over a period of years to a grouping of subject-matter divisions into a number of branches. The main obstacle had been the availability of staff to man such an organization, but by 1966 it appeared that recruitment plus the development of DBS officers could provide the necessary resources. The chart on the opposite page indicates the major characteristics of the new organization. The Socio-Economic Statistics Branch deals mainly with statistics derived from or related to households and persons. The Economics Statistics Branch covers statistics derived from business establishments, while the Financial Statistics Branch, so far as the private sector is concerned, deals with corporations. It includes also the government's Central Personnel Record System, administered by DBS on behalf of the Treasury Board and the Public Service Commission. The Corporations and Labour Unions Returns Act Administration has become increasingly integrated with the DBS statistical system and was incorporated into the Branch as a regular DBS division. The Economic Accounts Branch concerns itself with the analysis and publication of major aggregates such as the National Accounts, the Index of Industrial Production, the Balance of Payments and a time-series data bank. In the reorganization the increased importance of automation was recognized by the creation of an Operations and Systems Development Branch concerned with data processing, computer programming and other similar functions. Administration and Integration and Development functions which perform important services for the entire organization were not greatly altered in the reorganization.

Opportunities and needs for increased automation through the use of computers continue to be evident, and an internal committee of DBS officers reported during the year on very large computer requirements during the next 5 to 10 years. The existing computer equipment is proving inadequate to handle DBS data processing needs and plans are being developed for its replacement with a faster modern installation. The need for developing appropriate operational and programming staff, and for effective further integration of survey and computer processes are matters of concern.

Substantial efforts were expended during the year on introducing a system of program budgeting and responsibility accounting in line with the Government's policies of implementing recommendations of the Royal Commission on Government Organization. In the area of personnel management, classification of positions in line with the Government-wide program of assessing and classifying positions on a uniform basis throughout the Service continued and the intensity increased. To assist in meeting these objectives, it was necessary to reinforce the central personnel and financial staffs and to add administrative officers in some of the larger divisions. To enhance the Bureau's bilingual capability about one hundred officers and other employees attended French classes and a search was under way for a senior officer to act as an advisor to the Bureau on bilingualism. At the end of the year, this position had not been filled.

The quinquennial Censuses of Population, Agriculture and Merchandising were conducted in June 1966, following several months of intensive preparation and the training of some 1,600 Census Commissioners and 35,000 Census Enumerators. Results were fed into the DBS electronic computer equipment and the first results were published early in 1967. Plans for the more comprehensive 1971 decennial Census of Canada are already being considered and the first field test of methods and the self-enumeration procedure will be conducted in London, Ontario in September 1967.

Towards the end of the fiscal year the DBS embarked on a comprehensive program designed to effect gains in timeliness of as many statistical series as possible. As a start, a number of key economic indicators have been selected for immediate attention with the objective of promoting significant gains by the end of the 1967-68 fiscal year. These include employment and payrolls, imports and exports, retail trade, selected commodity data and the index of industrial production. Plans are also under way for making substantial gains in timeliness in a broad range of statistical series during the

next three years. A comprehensive records system is being developed and studies are being undertaken to detect causes for delays and ways and means of eliminating them. Longer-run plans involve large-scale conversion to automatic data processing procedures.

As is particularly necessary in a centralized statistical agency, close contact is maintained with users of statistical data both in federal government departments and outside. Associations representing users are especially important; examples of these are trade associations, the Canadian Council on Urban and Regional Research and the Association of Universities and Colleges of Canada. In terms of both development and use of statistics, close relations were maintained with the various provincial research and statistical agencies, whose importance continues to grow. Internationally, the Bureau has many links with other groups developing statistical concepts and techniques, and in establishing international uniformity in statistics. Canada has been a member of the Statistical Commission of the United Nations for many years, and close, though informal, contact was developed during the year with the Conference of European Statisticians, an extremely competent and influential body operating under the Economic Committee for Europe.

An important event was the holding of the Sixth Conference of Commonwealth Statisticians at the Dominion Bureau of Statistics from September 19 to 30, 1966. Preparation of the agenda, the distribution of contributed papers and the Conference administrative arrangements required a good deal of time of senior officials. Opened by the Minister of Finance, the Conference was attended by 22 delegates from 15 Commonwealth countries, with the addition of observers from the United Nations, the Republic of Ireland and the Commonwealth Secretariat-General, plus specialists from the Bureau and the West Indies. Other Commonwealth statisticians, unable to attend, received copies of papers and summaries of the discussions. 128 papers were contributed and the agenda included statistical topics of interest both to the older

Commonwealth countries and to the developing ones. The first Commonwealth Conference was held in London in 1920 and the following ones: in Ottawa in 1935, Canberra in 1951, London in 1956 and Wellington in 1960. The growth of independence has increased the number of countries attending. The Sixth Conference was designed primarily to promote and continue contacts between the senior officials in each Commonwealth country who are responsible for the preparation of statistics, to discuss concepts and methods and to extend mutual assistance in solving common problems. Topics of discussion ranged from problems of recruiting to construction of national accounts and lessons learned from computer utilization. A condensed report on the subjects covered at the meetings is available to interested persons. The Seventh Conference is scheduled for 1970.

In commemoration of Canada's Centenary of Confederation, a special publication of 512 pages, entitled *Canada One Hundred 1867-1967*, was produced in English and French by the Bureau for release early in the Centennial Year. A Spanish edition will also be produced for use of the Departments of External Affairs, Trade and Commerce, and Manpower and Immigration. A special edition of the Bureau's annual reference volume, *Canada Year Book*, will also be produced in 1967.

During the period of rapid growth in DBS in recent years, recruitment has been a major problem. While recruitment of professional staff at entrance grades has been relatively rapid, the supply of experienced professionals, with appropriate subject-matter knowledge, remains quite limited. However, a number of important positions were filled from outside DBS during the year, including directors for the Census Division, the External Trade Division and indirectly the Governments Division. Other directorates, which became vacant as a result of the reorganization and other internal moves, were filled from within the organization. In a period of continued pressure, the staff has responded by assuming significantly greater responsibilities, and the achievements of the year reflect their skill, loyalty and devotion.

CANADA YEAR BOOK DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official compendia of information on the Canadian economy, the *Canada Year Book* and the handbook *Canada*, the planning and production of a special volume designed to commemorate Canada's Centenary of Confederation, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study.

The work of compiling, editing and printing of the *Canada Year Book 1967*, including a specially designed cover and other features appropriately commemorating the Centennial of Confederation, extended throughout the fiscal year under review. Through the closely co-ordinated endeavours of the Translation Branch and the Printing Bureau with those of the Canada Year Book Division, it was anticipated that both the English and French language editions would be released for sale simultaneously in July or early August 1967 but a breakdown in arrangements for colour plates by an outside printer compelled a much later release.

In lieu of a standard official Handbook *Canada 1967*, a specially designed, enlarged, illustrated 512-page volume was produced entitled *Canada One Hundred 1867-1967 (Canada Un Siècle 1867-1967)* as the Bureau's contribution to the Government's program commemorating Canada's Centennial of Confederation. A first edition of 500,000 copies in the two official languages was placed on sale through the Queen's Printer's retail outlets as the fiscal year closed in March and provision was being made for publication of a Spanish edition for distribution abroad.

The special inquiries unit, focused around the Canada Year Book coverage of authoritative Canadian data, supplied regular series of statistics for the United Nations Statistical Monthly Bulletins, the United Nations Statistical Yearbook and for the International Labour Office. In addition, it provided up-to-date revisions of Canadian statistical and textual material for many standard national and international reference works and dispensed current and historical data in response to multi-subject inquiries received by the Bureau.

The Library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of

the DBS staff, research workers and the general public. It also has an extensive collection of statistical publications. The large increase of professional staff in the Bureau has taxed the services of the Library. Because of the greatly increased requirements for new publications and increased funds allowed for purchases, stress was laid on organizing an Acquisitions Unit to handle expeditiously book orders in the Library.

The *Historical Catalogue of Dominion Bureau of Statistics Publications*, produced by the Library, is scheduled for release during the forthcoming fiscal year.

A basic reorganization of the Library, including the addition of library technicians as supporting staff, is in the planning stage and calls for the organization of the Library in two main areas: the Library Information Services Area and the Technical Services Area. It is expected that when this organization is completed and additional staff recruited, the Library will be able to augment its present services with indexing, descriptive abstracting, and establishment of branch and satellite libraries in the subject divisions. It is also planned to apply punched card systems to certain basic library operational records with a view eventually to adopting computer operations.

INFORMATION DIVISION

During the year, the Information Division continued and improved its activities in the dissemination of the published information of the Dominion Bureau of Statistics to the public, the press, radio and television. It also channelled within the Bureau inquiries for statistical information and carried out publicity for the 1966 Census of Canada and other Bureau enterprises as well as handled many of the inquiries received for statistical information.

In connection with the 1966 Census of Canada conducted in June, a full publicity program was prepared which included paid advertising in daily newspapers, ethnic papers, farm journals, weekend magazines and on radio, in addition to the use of posters. Through the provision of information to the press, important support was given to the Census in editorial and news columns as well as that received from television and radio stations on a public service basis, and from grocery chain stores through the use of insertions in their regular advertising.

Toward the end of the year, preparatory work was begun on the publicity planning for the proposed test of a census by mail to be conducted in London, Ontario in 1967.

Exhibits indicating the advantages of using DBS information along with promotional material and statistical publications were prepared for a number of association meetings and conventions held during the year under review.

For the benefit of DBS and others concerned with statistics, preliminary work was begun on a film which deals mainly with the uses of DBS information, especially in business. It is intended primarily for showing at business and association meetings, service clubs, chambers of commerce and other groups.

The Information Division was involved in the preparation of speeches and of articles for a number of publications. Press liaison was undertaken for the development of feature articles on the organization and work of the Dominion Bureau of Statistics, particularly with the business and financial press.

A limited advertising program was undertaken, directed mainly toward the management levels of business and industry. It indicated the kinds of information available from DBS which can be used to the advantage of business firms and solicited requests for a publication on the DBS weekly output of statistics and an introductory booklet on the uses of statistics.

During the year a beginning was made on research work aimed at finding out more about the uses and users of DBS information. This included an analysis of DBS publications subscription lists. An analysis of DBS correspondence in reply to inquiries for statistics was also undertaken as well as a study into the effectiveness of dissemination systems for statistical information.

The volume of inquiries handled by the Inquiries Section of the Division continues to grow. Most of these were received from sources within Canada, but they also included many from abroad. A daily average of approximately forty written inquiries were received; some were transferred to statistical divisions for reply but in many instances, replies had to be assembled from a number of DBS divisions as well as from other sources, and in some cases, special tabulations had to be produced. Besides processing written inquiries, the Section handled numerous telephone requests for statistical information as well as received about 800 visitors who called at the office seeking informa-

tion. In addition, a number of tours of the DBS establishment were arranged for interested groups.

During the year, a system was established to select and provide to a limited number of trade publications the kinds of DBS information which would be of interest to the sectors of business and industry they serve. This has resulted in a wider dissemination of information on the availability of DBS statistics. Work will be continued on this project and it will be expanded to greater numbers of trade publications if it continues to be worth while.

Publication of the Daily and Weekly Bulletins continued. They are essentially summaries of DBS statistical output for the convenience of the press and of users of statistics. The average press run for the year for the Daily Bulletin was 1,700 English and 325 French copies, in addition to 2,700 English copies of the Weekly Bulletin. Publication of a French Weekly Bulletin, with a distribution of 350 copies, was begun during the year under review.

INTEGRATION AND DEVELOPMENT STAFFS

The following professional staffs are attached to the office of the Assistant Dominion Statistician for Integration and Development: Central Classifications (Research and Development); Sampling and Survey Research; Econometric Research; Regional Statistics, Research and Development; Company Establishment Integration; Special Manpower Studies and Consultation; Consultant on Demographic Research. A review of the activities of these staffs during the past fiscal year follows:

Central Classifications, Research and Development

In response to a demand from land use planners and others interested in detailed classification of economic activity for local areas, 4-digit SIC classes have been developed for the non-manufacturing part of the Standard Industrial Classification. Four-digit classes for manufacturing have been available for some time. Generally the 4-digit level of the SIC is less stable than the 3-digit and is, therefore, used less widely for statistical series. The new 4-digit classes have been developed in an experimental way and are subject to review and amendment as experience with their use becomes available.

Work has continued during the year in the preparation for publication of the Standard Geographical Classification manual. During the latter part of 1966 the classification was used in a co-operative project with the Taxation Di-

vision of the Department of National Revenue. The project had a twofold purpose: (1) to create an edit tape which could be used to correct misspelled post office names and, (2) to assign municipality codes on the basis of post office addresses supplied by individuals. Although the resultant convertibility tape was intended to facilitate the tabulation of certain income data by municipality, it would be equally useful for coding any list of post office addresses.

The implementation of the Standard commodity Classification is continuing, notably for manufacturing and transportation statistics. Considerable work has been done on the second draft of an expanded version of the Standard Commodity Classification for coding materials and supplies used as well as commodities shipped by manufacturing establishments. A convertibility computer tape linking the American Standard Transportation Commodity Code, the Canadian Standard Commodity Classification and a list of freight items to be reported by Canadian railways has been developed in co-operation with the CNR and the CPR. Freight statistics for 1967 will be reported by those railways on both the new and the old bases.

The increasingly important field of Occupational Classification has received considerable attention during the year. In co-operation with the Department of Manpower and Immigration, a project is now under way to develop a Canadian Standard Classification and Dictionary of Occupations. This is a major undertaking and will result in a classification suitable for statistical surveys (including the Census); manpower

analysis; operational programs such as employment placement, vocational training and immigration and wage analysis. It is planned that the classification structure will be available for use in the 1971 Census of Population.

During the past year a beginning was made in the program to facilitate the integration of establishment and company statistics. A pilot project was completed to tabulate employment and earnings data for industries on the basis of companies as well as establishments. This project, which will demonstrate the influence of the statistical unit on the industrial distribution of data, will serve as a guide when other series in the Bureau are investigated for the same purpose.

Another project begun during the year is associated with standard data processing codes. DBS divisions which are beginning new work requiring electronic data processing, were asked to use certain standard codes wherever possible. Programmers were also asked to watch for these standard codes and to inform the Central Classifications Staff of cases in which they are not used so that remedial action can be undertaken.

Sampling and Survey Research

During the fiscal year 1966-67 a substantial amount of work was devoted to a program of analysing the coverage and content errors of the 1966 Censuses of Population and Agriculture. This program consists of four projects. The first project involved the selection of a sample of persons from the 1961 Census records supplemented by a sample from other lists, such as a list of immigrants and a list of children born in the period 1961-66. An extensive effort was made, using mail methods as well as personal enumeration, to locate the current address of each person in the sample (approximately 25,000 persons). This phase of the project is almost completed with close to 98 per cent of the original sample of persons being located. The next phase of the project will involve searching the 1966 Census records to ascertain if these persons were enumerated in that Census. An estimate will then be made, by province as well as by broad age groups, of the number of persons not enumerated in the 1966 Census.

The second project is designed to provide estimates of under and over-enumeration of households in the 1966 Census as well as some estimates of content error. It is based on matching approximately half of the households enumerated in the May 1966 Labour Force Survey with the 1966 Census records. The matching has been completed and specifications are now being written for the tabulation programs.

The third project relates to the 1966 Census of Agriculture. It is based on the enumeration of a sample of area segments and farms within these segments by specially trained enumerators, using detailed questionnaires and the comparison of the results of this enumeration with the results of the Census of Agriculture. The field work for the project has been completed and the matching between this special enumeration and the Census of Agriculture is well along the way.

The fourth project is somewhat more specialized. Its objective is to ascertain whether persons who moved a few months prior to the 1966 Census are more likely to be missed by the Census than the rest of the population. For this purpose, the Post Office in Metropolitan Ottawa provided a list of persons who according to their records changed their address during the period May 15, 1966 to June 15, 1966. The Census records are now being searched to ascertain the proportion among these persons who were not enumerated in the Census. It is expected that all four of these projects will be completed by the end of the calendar year 1967.

In collaboration with the Census Division and the Special Surveys Division, work has continued on the planning of test censuses. The first census test will be conducted in September 1967 in London, Ontario. The staff participated in the general and detailed planning of methods and procedures to be used for the census test. A special responsibility rests with the staff in relation to developing specifications for the computer edit of the returns as well as for developing and conducting a program of evaluation of the census test results.

The Labour Force Survey has continued to receive substantial attention from the Sampling and Survey Research Staff. The sampling variability of some thirty characteristics is calculated and issued each month along with the sampling variability of estimated differences. Work continues on the analysis of sampling variability and its breakdown into the components which can be ascribed to different stages of sampling. In collaboration with the Special Surveys Division, a new series of monthly tables has been originated analysing the performance of the survey in terms of non-interviews, the extent to which the sample fails to include the appropriate proportion of persons in different age groups, and other characteristics.

In co-operation with the Labour and Central Programming Divisions, work has continued on the automation of the Monthly Employment Surveys. It is expected that as a result of this project the preparation of estimates from the completed returns, the various procedures which update the sampling frame, the selection and control of the rotation of the sample, the printing of address labels and the control of

the mailing operation will all be handled by computers. The relevant computer programs have now been written and tested and it is expected that the new system will go into production within the next few months.

In collaboration with the Manufacturing and Primary Industries Division, a new survey system has been designed for the Current Survey of Shipments, Inventories and Orders. The objectives of the system are to automate the operation and to improve some of the estimating procedures. The system which incorporates a degree of flexibility, unusual in a computer system, has been tested on a manual basis for several months and is now being programmed for transfers to the computer.

Significant and original research has been carried out on the problem of record linkage by computers. A pilot project has been initiated to link records between two large files. Linkage will be done by the computer using such characteristics as name, age, sex and marital status.

Data collected on goods brought into Canada by tourists have until now been collected and processed on a 100 per cent basis. In co-operation with the External Trade Division, a design was prepared for the selection of a sample of tourist exemption forms in order to reduce the processing load associated with the survey. The sample survey is now operational.

A sample was designed in collaboration with the Merchandising and Services Division for the Wholesale Trades Survey. This survey is now operational. Preparations have begun to transfer the processing operation to the computer.

An extensive research project is currently carried out which will lead to a new design of the Retail Sales Survey. The presently used version of the survey is not based on a probability sample. Also there are some difficulties in the present survey operation in estimating the impact of new stores coming into existence and existing stores going out of business. The current research concentrates on developing a hybrid design of list sampling and area sampling which it is hoped will combine most of the advantages of the two methods.

A new section called the General Survey Systems Staff has been created during the last fiscal year. This section is charged with the development and implementation of an automatic geocoding project. The objective of the project is to use the computer to assign geographic codes and co-ordinates (possibly latitude and longitude co-ordinates) to individual records which relate to locations and which are identified by their postal addresses. Once the records are so geographically coded, this will greatly facilitate the aggregation of statisti-

cal data for any type or any shape of area, for which users would like to get information. The developmental work during the last fiscal year proceeded in three directions. Systems specifications were developed and programming work is partially completed for the computer assignment of the geographic location identifiers in urban areas. Concurrent with this activity, work has begun to develop the large computer-stored directories which are necessary for the operation of the geographic coding system. Finally, arrangements have been made to begin the systems development which will lead to a computer program capable of accepting addresses which are recorded in a non-standard format and translate them into the standard format necessary for the application of the main programs of geocoding.

Consultation services were provided on a large number of smaller problems and projects involving most of the divisions of the Bureau as well as several other federal and provincial government departments. Special mention should be made of the technical aid extended to the Government of Jamaica in designing a general purpose household survey. A paper has been written for the Journal of the American Statistical Association on the new design of the Labour Force Survey and another paper has been written on Record Linkage, which will be presented at the International Statistical Institute in Sydney, Australia, and at the meeting of the Information Processing Association in Jerusalem, Israel.

Econometric Research

The function of the Econometric Research Staff is to carry out studies and consultative work involving the application of econometric methods and to work in close co-operation with research groups in other government agencies.

The Econometric Research Staff contributed substantially to the development of a computer storage and retrieval system (data bank) for published economic time series. This project was carried out jointly with the Current Business Indicators and Data Bank Staff of the Economic Accounts Branch, the Central Programming Division, and in close collaboration with several other government agencies.

Considerable emphasis is placed on the application of computer techniques to the improvement of timeliness and efficiency in the preparation of various DBS series. During the period under review, members of the Econometric Research Staff were involved in major projects of this kind in connection with the national accounts and the indexes of industrial output.

The testing of alternative methods of seasonal adjustment is a continuing function and this involved a substantial portion of the time of one member of the staff during the year.

Also, arrangements were made to support and participate in a developmental time-series analysis project to be carried out at a Canadian university.

Another continuing function is the restoration of continuity in time series which have been broken by changes of various sorts, including changes in classification systems. In particular, effort was devoted to revising employment series for the period before 1961 in accordance with revisions of the industrial and occupational classification systems.

A major research project was initiated to determine the feasibility of estimating certain labour and other series for areas smaller than provinces using econometric methods. This project is being conducted in co-operation with the Regional Statistics and Analysis Staff.

A substantial amount of time was devoted to liaison with other government agencies and the carrying out, or co-ordination, of projects undertaken at their request to meet specific needs for data or analyses.

Regional Statistics, Research and Integration

This staff is responsible for developing, or co-ordinating, research programs designed to improve and extend regional and small area statistics to serve the needs of various federal, provincial and municipal governments; and to increase the utilization of administrative records for statistical purposes.

Considerable progress has been made on a major exploratory project designed to develop post-censal population estimates for counties and census divisions, utilizing data from a variety of sources. Work has begun on developing small area economic indicators utilizing up-to-date statistical techniques. A *Guide to Regional Statistics* is being designed which will include a list of unpublished regional data (excluding population census data). The staff provided substantial assistance in a project of re-defining the boundaries of the Saskatchewan Census Divisions and participated in other projects, in particular developmental work designed to develop income estimates by small areas.

Company Establishment Integration

This is a new program with a dual objective: first, to link financial and production statistics in a fashion which would satisfy demands for information to promote analysis of one in relation to the other within a more consistent and detailed framework than now exists; second, to simplify and reduce the burden of response. Production inputs and outputs such as

sales, payrolls, materials used, and inventories, have been collected for many years by the Dominion Bureau of Statistics and mainly on an establishment basis. Comprehensive financial statements containing the same items of information, on the other hand, have become available much more recently to DBS, and principally on a company basis. A suitable sample of establishment and company returns will be studied to determine the reporting differences for the same items of information, the reasons for these differences and what can be done to eliminate them, where appropriate. If warranted by the results of this study, a reporting system will be developed for companies and their establishments which would insure that, where appropriate, respondents relate or integrate in a consistent fashion at the reporting stage data which apply to the different levels of the organizations. This should be conducive to the simplification of reporting. Experimentation with draft questionnaires designed to link company financial statements with a wide range of data collected at the establishment level is an integral part of the project.

Special Manpower Studies and Consultation

This program is designed to carry out analytical and developmental work in the area of manpower and labour markets. The analytical research program is focused mainly on the analysis of household survey data derived from the monthly labour force sample or the decennial Census. A number of research studies have been published and more are being planned. The studies have been designed to reach a wide non-technical readership but should also be useful to policy formulation in the sphere of manpower programs.

The developmental research program is at present centred on the job vacancy survey being undertaken on behalf of the Department of Manpower and Immigration. Since the measurement of labour demand by means of establishment surveys is largely an uncharted field, the problems arising from the definition of an operationally feasible concept are substantial. The staff is also responsible for planning of an experimental program on labour force definition and measurement. Such developmental research is of growing importance in view of the prominence of manpower policy in Canada and the greatly increased demand for more and more complex labour statistics.

Consultant on Demographic Research

The Consultant on Demographic Research provides consultation services in the field of demographic research and related areas and carries out research and analytical work with special reference to internal migration and other components of population change that interact

with migration flow. The Consultant also conducts experimental and developmental research in a number of related fields. During the year, special tabulations of 1961 Census data on migration were prepared at the request of various census data users and for selected census bulletins. Work was continued on the 1961 Census

monograph on internal migration in Canada and a first draft of the 1961 Census monograph on urbanization in Canada was completed. Consultation and special tabulations were provided to the Economic Council of Canada in its development of background information and projection of trends in Canadian urbanization.

ECONOMIC ACCOUNTS BRANCH

The Economic Accounts Branch is responsible for the assembly and analysis of statistics within an overall national accounting framework, through its Balance of Payments and Financial Flows Division and the National Accounts, Production and Productivity Division, the Current Business Indicators Section and the establishment and maintenance of data banks of economic time series.

Balance of Payments and Financial Flows Division

The Balance of Payments and Financial Flows Division is concerned with the construction, analysis and publication of statistics and reports related to Canada's international economic and financial transactions and international investment position. A new addition to these long-standing activities is responsibility for development of a set of comprehensive financial accounts drawing together data for the various sectors of the Canadian economy. The current publication program includes reports covering such areas as the balance of payments, international travel, international security movements and external assets and liabilities.

In the balance of payments field, work was completed on a new publication, *The Canadian Balance of International Payments, A Compendium of Statistics from 1946 to 1965*, which revises earlier data and presents extended detail in convenient and accessible form. Much work was also done on *The Canadian Balance of International Payments 1963, 1964 and 1965*, and *International Investment Position*, which will bring forward the series published in earlier annual volumes and will contain some extended detail including a special analysis of the principal statistics of manufacturing establishments of foreign-controlled enterprises in Canada. This publication will represent a substantial catching up in the Section's program.

During the year under review regular publication of seasonally adjusted series for all the major items of the current account was commenced. The continuing program of developmental work in the balance of payments field involves close observation of new international economic and financial developments and adjustment of the statistical processes and framework to reflect them. Improvements and extensions

were made in the published measures or detail of export credits, forms of short-term money market instruments developing an important international role, the foreign aid program, and the extension of participation in the United States equities market by institutional investors in Canada, as well as work on the early balance of payments effects of EXPO '67. The Section is providing an increasing amount of guidance to users through consultation and correspondence.

International travel statistics were affected by the discontinuance in March 1967 by the Department of National Revenue of issuance of traveller's vehicle permits for automobiles of non-residents entering Canada. The removal of this requirement, which has been made possible through the co-operation of all provincial vehicle licensing authorities, will greatly simplify entry procedures for tourists. Customs control will be maintained through the vehicle registration process. The traveller's vehicle permit was also used as a statistical document to establish the number of foreign vehicles entering and information on state of origin, place of entry and departure, length of stay and expenditures in Canada. It was the basis of important elements in the travel expenditure accounts of Canada and the United States, under a co-operative arrangement between DBS and the statistical authorities in the United States. As a replacement for this procedure, Canadian Customs will record the number of foreign vehicles on entry into Canada into three main groups, on the basis of intended length of stay. For other statistical purposes, vehicles will be sampled through the use of questionnaires jointly by the Canadian and the United States statistical authorities.

Also in March 1967 a new document was introduced by the Department of Manpower and Immigration for control of non-immigrants from countries other than the United States. A series of tabulations will be prepared by data processing and made available to DBS. This procedure will provide more complete information on country of origin. Statistical data on purpose of trip, length of stay, destination, and expenditures in Canada will be obtained through the use of questionnaires distributed by Canadian Customs or Immigration officers as the visitor enters Canada.

In the field of the financial accounts, developmental work has proceeded within the Financial Flows Section in preparation for publication. A description of the program in the Bureau in this field was set out in an article in the *Canadian Statistical Review* in November 1966.

National Accounts, Production and Productivity Division

The organizational changes within the Bureau previously referred to resulted in the creation of a new division called the National Accounts, Production and Productivity Division. The newly created division co-ordinates, processes and analyses information from a variety of sources. This encompasses responsibility for the national accounts income and expenditure flows, the work on gross domestic product by industry in both current and constant prices, (the latter including the index of industrial production) and the development of measures relating to the aggregate productivity performance of the Canadian economy and its major sectors, as well as the productivity analysis of selected industries.

Responsibility for the production of the *Canadian Statistical Review* and the concomitant production of monthly articles for this publication as well as further development and research of seasonally adjusted data has become the direct responsibility of the Economic Accounts Branch as a whole. A regular program of monthly articles in the *Canadian Statistical Review* has been maintained throughout the past fiscal year as well as experiments with more advanced mathematical research techniques for removing seasonal fluctuations from Canadian economic time series. In addition, a more highly developed version of the United States Bureau of the Census computer application for seasonal adjustment has been adopted for a number of economic time series published in the *Canadian Statistical Review*.

In collaboration with the Economic Council of Canada and the Bank of Canada, intensive work in the construction of a time series data bank was also instituted during the past fiscal year. It is felt that the operation of such a bank scheduled for the present fiscal year will be a significant improvement of the Bureau's service facilities.

The work of the newly created division encompasses a wide range of economic statistics. It includes the principal comprehensive statements and indicators relating to the Canadian economy, in particular those which deal with the internal and production data of the Canadian economy. In addition to the provision of day-to-day assistance to many business, academic and government users, considerable material was

furnished to such other government agencies as the Departments of Finance, Trade and Commerce, the Economic Council of Canada and the Bank of Canada for the preparation of their reports and for their needs in fulfilling their obligations as economic advisers to the government.

Regular publications of the division include the following: *National Accounts, Income and Expenditure*, quarterly and annual reports; the monthly publication of the *Indexes of Industrial Production* and the *Quarterly Indexes of Non-Agricultural Real Output* as well as the annual publication of the *Survey of Production* which deals with the output of commodity industries.

In the productivity area, a revised and more up-to-date version of the aggregate indexes of output per person employed and per man-hour in Canada was published during the fiscal year. This revised publication now provides coverage for agriculture and extends the scope of the index back to 1946 and includes the year 1965. A special report, *Productivity Trends in the Synthetic Textile Mills, Breweries and Pulp and Paper Mills Industries*, was published. It is hoped that this report constitutes the first of a number of specialized industry reports which will be published during the course of the next few years.

Of special interest during the past fiscal year has been the basic revision and publication of the monthly and annual indexes of industrial production. This revision resulted in improved data from 1949 to 1965 and was occasioned by the inclusion of more recent census-based annual levels in the manufacturing, mining and electric power and gas utilities industries. This is the first step in a continuing program of improvements which will extend over a number of years and is caused by the necessity to revise the index of industrial production as well as the total real domestic product in constant dollars in order to incorporate revisions to the Standard Industrial Classification and to eventually change the time and weight base from 1949 to 1961.

The division also participated very actively in the international deliberations and conferences which are taking place in connection with the proposed revision of the United Nations international system of standard national accounts. In this connection, members of the staff attended conferences of the working group on National Accounts and Balances of the Conference of European Statisticians in Geneva as well as a conference called by the American Association for Income and Wealth. The division also acted as host, late in the fiscal year, to a senior member of the U.N. Statistical Office to further discuss proposed changes by the United Nations.

A paper on *Problems in the Estimation of Industry Output in Current and Constant Dollars in Canada* was prepared jointly by two members of the staff for the Conference on Research in

Income and Wealth sponsored by the National Bureau of Economic Research which took place in Washington in December 1966.

FINANCIAL STATISTICS BRANCH

The Financial Statistics Branch, which was formed on January 1, 1967 as part of the reorganization of the Dominion Bureau of Statistics, consists of the Director General of Financial Statistics, the Co-ordinator of Financial Statistics, the Business Finance Division, the Corporation and Labour Unions Returns Act Division, the Central Pay and Records System and the Governments Division.

The Dominion Bureau of Statistics has for many years produced important financial series such as those for government and for the balance of payments. In the last few years, however, the work has been greatly expanded, with the assumption of responsibility for the Corporation and Labour Unions Returns Act and substantial increases in the financial statistics produced by the other divisions. Emphasis has been put on the timeliness, consistency and comprehensiveness of financial data. Within the next year or two the fruits of this work will become evident in the publications of the Branch.

Two of the Divisions in the Financial Statistics Branch--the Central Personnel Records System and the Business Finance Division--produce important series in addition to financial statistics. Of course, major areas of financial statistics are included in the Balance of Payments and Financial Flows Division of the Economic Accounts Branch and are also the concern of the Co-ordinator, Consumer Finance Research Staff, of the Socio-Economic Accounts Staff, and other divisions are involved to a lesser extent in financial statistics. The Co-ordinators of the Branches have as one of their functions the maintenance of consistency in their area of concern throughout the DBS organization.

Business Finance Division

The Business Finance Division is responsible for statistics on profits, assets and liabilities, capital expenditures, fixed capital flows and stocks, research and development expenditures, construction activity, housing, building permits, cheques cashed and commercial failures. This work is carried out in the following six sections.

The Financial Statements Section is concerned with the collection, analysis and publi-

cation of quarterly financial data from balance sheets and operating statements in both the financial and non-financial sectors of the economy. Additional work has been done on collection and compilation of 1966 quarterly financial data for fire and casualty insurance companies. These statistics will be published with the other quarterly balance sheet data in 1967. Development work on credit union statistics was begun in 1966 and publication of quarterly balance sheet data is expected to start in 1967. Other development work is continuing in the major industrial groups of the non-financial sector and the additional information will be published following the collection, editing, improvement and analysis of results. Work is also continuing on the development of a single quarterly report for approximately 40 major industrial groupings. This report will show balance sheet items, a statement of revenue and expenses, as well as sources and uses of funds for these industry groupings.

In the Capital Expenditures Section, existing annual surveys are being continued to provide estimates of intentions and current levels of capital and repair expenditures on construction and on machinery and equipment. During 1966, contract drillers of oil and gas wells were surveyed with a revised questionnaire resulting in improved estimates for this area. Work is continuing on the development of new questionnaires and improved survey procedures for the metal and non-metal mining industry, petroleum and gas industry, electric power and pipelines including gas distribution. This work is at various stages of completion in an overall program of adapting questionnaires and survey procedures to take account of special statistical problems in each industry group. Attempts are being made to include related needs of other divisions in the Bureau and other agencies in this up-dating of procedures. Investigations are also continuing to determine the most efficient means of compiling timely mid-year estimates of intended capital expenditures by province to permit future regular publication. In other areas, sources of basic information on new investment projects are being expanded, the coverage of wholesale trade is being re-assessed and preliminary investigations were started for the purpose of determining the feasibility of carrying out a quarterly survey of capital expenditures.

In February 1967, the National Wealth and Capital Stock Section released two publications. The first, *Fixed Capital Flows and Stocks, Manufacturing, Canada, 1926-1960, Methodology*, contains a review of the concepts, sources and other methods used in the preparation of the statistical material on flows and stocks of capital goods in manufacturing industries. The second report, *Fixed Capital Flows and Stocks, Manufacturing, Canada 1926-1960 - Statistical Supplement* is a complete tabular presentation of the estimates of flows and stocks in manufacturing. These estimates are based on five different sets of assumptions on the average economic lives of capital goods. The estimates are also presented in terms of 1949 constant dollars, 1957 constant dollars, current dollars and original dollars. Following publication of this information, work is continuing on problems arising from revision of the Standard Industrial Classification in 1960 because the revisions precluded an immediate extension of capital stock estimates to more recent years. Development is also continuing on estimates of flows and stocks of capital for non-manufacturing industries.

The Scientific Activities Surveys Section carries out two regular surveys for data related to scientific research and development in Canada. The first survey of the Federal Government was completed during the past year and the results were published in *Federal Government Expenditures on Scientific Activities, 1964-65*. A subsequent annual survey, using a shorter questionnaire, was completed in March 1967 and results will be published later in 1967. The regular biennial survey of Canadian industry was completed in February and results will be released later in 1967. During 1966, two additional special projects were undertaken and the results published. The first was an article entitled *Statistics of Scientific Research and Development in Canada* which was included in the November 1966 issue of the *Canadian Statistical Review*. The second was a short report *Expenditures on Scientific Activities by Non-Profit Organizations* which included information from a special survey of non-profit organizations. An additional and important project during 1967 will be the start on a preliminary study of a program of surveys of research in the social sciences. During the coming year, as in previous years, close liaison will be maintained with the Directorate for Scientific Affairs of the Organization for Economic Co-operation and Development, the National Research Council, the Department of Industry and the Science Secretariat.

Annual surveys of construction contractors and federal and provincial government departments were recently completed for 1965 by the Construction Section. These surveys provide basic data on labour and material content of construction work and other related statistics.

Pertinent information derived from the investment survey in the Division was also analyzed for inclusion in the statistics on construction activity to be published during 1967 in *Construction in Canada, 1965-1967*. Some preparatory work was done in this Section as part of studies being started to determine the feasibility of a census of the construction industry and to plan such a census.

The Housing and Building Permits Section continued its regular monthly survey of municipalities for the value, number and type of building permits issued. The resultant monthly data have been published regularly as in previous years. The Section also continues the monthly publication, *New Residential Construction* which includes statistics on dwelling units started, under construction and completed. These statistics are derived from a nation-wide survey by the Central Mortgage and Housing Corporation. Apart from these compilations, work continued in a program of research and development directed toward the improvement of the method followed in estimating residential capital formation. Investigation was centred mainly around the problem of measuring physical volume of construction work put in place as influenced by seasonal variations, regional differences and recent tendencies favouring the construction of high rise apartments and luxury homes. New procedures were also developed to obtain more information from CMHC housing records, particularly in the determination of construction costs of various types of dwellings.

Other work in the Division includes a re-examination of various aspects of the monthly series "Cheques Cashed in Clearing Centres" in co-operation with the Canadian Bankers Association. The quarterly series on commercial failures are also being reviewed.

Corporations and Labour Unions Returns Act Division

The administration of the Corporations and Labour Unions Returns Act, passed by Parliament in 1962, is the responsibility of the Dominion Statistician and during the fiscal period ending March 31, 1967 was integrated into the organization of the Dominion Bureau of Statistics. The main reason for this organizational change was the recognition that the duties and responsibilities of this group had extended beyond the administration of the Act, particularly in connection with the analysis and publication of data formerly produced by the Department of National Revenue in the publication *Taxation Statistics*. The closer association of this division of the Dominion Bureau of Statistics will further facilitate the integration of corporation financial statistics resulting from the financial statements filed by corporations under the Corporations and Labour Unions Returns Act

and the Income Tax Act with other economic statistics.

The purpose of the Corporations and Labour Unions Returns Act is to collect financial and other information on the affairs of corporations and labour unions carrying on activities in Canada; to determine, on the one hand, the extent and effects of non-resident ownership and control of corporations in Canada, and on the other hand, the extent and effects of the association of Canadians with international labour unions. At the same time a program of corporation financial statistics has been developed which will provide considerably more information on the activities of corporations in Canada than has been available previously. This additional information will be available for corporation fiscal periods ending in 1965 and will be published during 1967.

The Corporations and Labour Unions Returns Act requires that an annual report be prepared for presentation to Parliament. Annual reports have been prepared and released for fiscal periods ending in 1962, 1963 and 1964 for labour unions, and for 1962 and 1963 for corporations. It is expected that the timeliness of these reports will be improved during 1967.

Central Personnel Record System

The Central Personnel Record System is a new division located in the Financial Statistics Branch of DBS. It was established by Treasury Board Minute 654427 dated April 12, 1966 and an announcement to the Heads of Government Departments was made through means of a Treasury Board letter released on June 30, 1966. This action resulted primarily from the recommendations of the Glassco Commission which stated "that personnel statistics for the Public Service be centrally tabulated by the Dominion Bureau of Statistics for use of the Treasury Board, the Civil Service Commission and departments". The Government announced approval of this recommendation on November 5, 1963 following which an interagency committee was established for the purpose of developing a draft guide on personnel statistics. After this guide was produced, a firm of management consultants was engaged to design a personnel record system suited to implement the approved recommendation.

The System is under the policy control and general direction of the Treasury Board and will be operated and administered by the Dominion Bureau of Statistics. Closely associated in the development of plans for the new System are the Public Service Commission and departments and agencies of the Federal Government.

The basic purpose of the system is to provide the central agencies, including the Treasury Board, the Public Service Staff Relations

Board and the new Public Service Commission with data on manpower of the Federal Public Service suitable to assist them in deriving policy on manpower management. This includes its implications as regards staffing, career development, collective bargaining negotiations (including pay rate negotiations), projections of future staff requirements and the derivation of relationships between the cost factors of various projects required to be undertaken by the several government departments. In addition, departments will be provided, as required, with data enabling them to improve their personnel management capabilities. The extent to which this information is derived from the Central Personnel Record System will depend upon the departments' need for information and the capability it may have for generating it out of its own personnel records files. The System will also be used for the purpose of deriving statistical information for use in DBS publications and distribution to the general public.

Because the Central Personnel Record System is essentially a service agency with the primary purpose of providing management data for the use of central agencies and departments of the Federal Public Service, it differs from all other DBS divisions. Its source of information is derived from the personnel and other documents relating to positions and personnel produced by both departments and central agencies. Its output is primarily designed to service the needs of the suppliers of information. In addition, it will service the public need for statistics on the Federal Public Service. The Governments Division of DBS which is responsible for the publication of such statistics will be a customer of the Central Personnel Record System.

During 1966-67 the planning for implementation of the System has advanced rapidly and the initial CPRS tape file will be in existence in the near future. This file will be limited in both the information contained and the number of positions and employees covered. Coincident with the development of the System, an extensive forms study on personnel and position action documents has been undertaken and the results of this study will bring about alterations in the system initially used to support the data. For this reason, and because of the magnitude of the task assigned, the Central Personnel Record System will be substantially limited in its ability to satisfy requests for information on the Federal Public Service during at least the first two years of its existence. A priority system will, therefore, be operated to deal with new demands for data.

Governments Division

In line with the reorganization being effected in DBS, the governments section of the Governments and Transportation Division became a

separate division of DBS effective January 1st, 1967.

The Governments Division is responsible for the collection, tabulation and publication of financial and other data related to the three levels of governments and their enterprises. The emphasis during the past year has been on the improvement of annual statistics, particularly those of municipal governments, and on the development of quarterly and monthly series which will improve the timeliness of the information published. New developments during the year relate to extensions of the statistical program, consultative services and program development.

Discussions were continued with federal and provincial enterprises to obtain quarterly statistics relating to revenue, expenditure, assets and liabilities. Better statistics in this respect will improve the quality of the quarterly estimates of depreciation and profits, and will enable the preparation of quarterly balance sheets, and sources and uses of funds statements.

Considerable effort was expended on improving the quantity and timeliness of financial data provided by provincial governments on both a quarterly and annual basis. Joint collection arrangements with respect to municipal finance statistics were effected with the provinces of British Columbia and Manitoba and improvements in the working arrangements in this respect with the Quebec Bureau of Statistics were satisfactorily effected.

Members of the Division attended numerous meetings with the Secretariat of the Tax Structure Committee and advised on the quality and timeliness of analyses of provincial government revenue and their suitability for inclusion in the base calculations of a new system of federal-provincial tax equalization payments.

The Division was represented on the Inter-departmental Committee on Expenditure Coding set up under the auspices of the Comptroller of the Treasury. This committee met numerous times during the year and made certain recommendations which have resulted in a Management Improvement Policy Decision by the Treasury Board to completely revamp the system of accounting for expenditures in each department. It is gratifying to note that the classifications adopted closely conform to the classification included in the main statistical publications of the Division.

The Division is also represented on the National Committee on Governmental Accounting established by the Municipal Finance Officers' Association of the United States and Canada.

Unless the needs of users of a statistical series are known, it is extremely difficult to evaluate the suitability of the statistical product. In an effort to determine the needs of users of municipal finance statistics, a conference on municipal finance statistics, jointly sponsored by the Canadian Tax Foundation, the Canadian Council on Urban and Regional Research, the Institute of Local Government of Queen's University and DBS was convened at Queen's University in May of 1966 at which some 125 people attended. Since then the staff of the division have endeavoured to evaluate the points of view put forth by the various participants.

An outcome of this convention, DBS has contacted the Departments of Municipal Affairs in each of the ten provinces and has arranged a conference in the early part of April 1967 to determine the minimum requirements which should be suggested for good municipal finance reporting. As a preliminary to this conference, DBS has prepared for publication *A Review of Conferences on Municipal Finance Statistics 1937-1966* and has also obtained the views of each provincial department of municipal affairs on the format of municipal finance reporting as well as prepared a brochure outlining the views of the Division in this respect. It is hoped that the aforementioned publications will become working documents which will set the pattern for a more sophisticated form of finance reporting by Canadian municipalities than has ever been envisaged to date.

In anticipation of convening a conference on provincial finance statistics, in the fall of 1967, similar to the conference on municipal finance statistics, the Division has produced a publication titled *A Review of Dominion-Provincial Conferences on Provincial Finance Statistics 1933-1960*. This publication provides a summary reference to the work accomplished during a number of Dominion-Provincial Conferences on provincial finance statistics which ran from 1933 to 1960. It includes a commentary on the work of each of the six conferences and a detailed presentation of recommended classifications of revenue, expenditure, assets and liabilities, together with suggestions with respect to terminology, accounting treatment for special transactions, uniform fiscal year ends and the co-ordination of statistics relating to government finance. This document may set the stage for fruitful discussions with the provinces and result in a more sophisticated statistical product than has been heretofore available.

Staff of the Division have been active in informing suppliers and users of government statistics of the Division's program.

ECONOMIC STATISTICS BRANCH

The Economic Statistics Branch was formed on January 1, 1967 as part of the Bureau reorganization and covers the operations of six divisions and an "Input-Output" research and development staff. Branch activities are principally concerned with the collection, processing, analysis and publication of statistics derived from business establishments. These consist, in general, of production, sales and service "units" in contrast to the reporting universe of the Financial Statistics Branch which, so far as the private sector is concerned, deals with companies.

For the most part the collection of the information is carried out by means of hundreds of current and annual "mail type" surveys of varying sizes although a number of "enumeration type" surveys are also involved. The Branch tends to concentrate on production or sales of commodities and services, materials used, employment, prices and the internal and external flow of commodities.

External Trade Division

The External Trade Division is responsible for the production of Canada's import and export trade statistics, and for the analytical and clerical work required to produce these series. Available publications and office records provide data on exports and imports by commodity, by country, by province of customs clearance and by stage of fabrication; on exports by mode of transport, and by province of lading; and on imports whether goods arrived directly at Canadian ports or via United States ports and by tariff item.

Stage of fabrication statistics for both exports and imports, and the United States state of consignment statistics for exports are the latest projects of the Division. Compilation by stage of fabrication commenced in January 1966 and office records are available on quarterly basis. The compilation of Exports by U.S. state of consignment, initiated in January 1967, will provide monthly statistics on commodity by U.S. Census subdivision and also on U.S. Census division by commodity. It is hoped that after a period of thorough testing to ensure that the secrecy provisions of the Statistics Act are complied with, the information obtained from these tabulations can be made available to the general public.

The Export Commodity Classification established in 1961 was completely reviewed and revised before reprinting in 1967 and all one-class commodity groups were eliminated to facilitate the task of compiling and publishing export trade statistics by commodity groups

without fear of divulging transactions of individual firms or exporters. The 1967 edition of the Export Commodity Classification shows the effective date when each commodity class was established.

A sampling technique for processing tourist import entries, developed during 1966, provides a breakdown of eight commodities by country of "tourist purchases exempt from duty" instead of total value as previously published. Effective with January 1967, monthly import statistics of tourist purchases will be published on this basis. Also, during the latter part of 1966 and the first months of 1967, feasibility studies were carried out on import statistics by country of origin, mode of transport and the United States state from which consigned. Further progress was also made in the revision of import and export price and volume indexes which are being put on a new 1960-61 base. Despite staff shortages, some progress was made during the last half of 1966 in reducing the backlog of uncoded import documents and plans were formulated for a general improvement in the quality and timeliness of both export and import statistics.

In an attempt to improve timeliness further, special tabulations and program changes are being kept to a minimum in 1967 and additional improvements in the release of preliminary reports are expected from the adoption of accelerated audit techniques and the extension of sampling.

Input-Output Research and Development

The construction of input-output tables for Canada for the year 1961 commenced late in 1962 and during the fiscal year ending March 31, 1967 approached completion. Publication of these tables is expected in the fiscal year ending March 31, 1968.

During the preceding fiscal year the estimation of industrial inputs and outputs was completed on a preliminary basis. Industry and commodity classifications suitable for input-output purposes were defined and data on production, materials used, imports and exports were classified according to these classifications. Service inputs into the manufacturing industries were also calculated in conjunction with estimates of labour and capital inputs. Work also proceeded on the estimates of material, service, labour and capital inputs into Agriculture, Mining, Transportation, Communications, Trade and Services. Trade and transportation charges on the movement of commodities from producers to users were also estimated.

During the coming year, it is expected that the work on assembling the tables will be completed, that apparent discrepancies between various sources of information will be explained and reconciled, that certain totals which can be derived from input-output tables will be compared with corresponding National Accounts' totals and that reconciliations of discrepancies will, as far as possible, take place in conjunction with the impending revision of the National Accounts prior to the publication of the input-output tables.

Labour Division

The Labour Division is responsible for a broad program of labour data ranging from statistics of labour input and labour cost to statistics of unemployment insurance and private pension plans. This program includes both production of statistics and research directed at the extension and improvement of data produced in the Division.

During 1966-67 a number of changes took place in the organization and functions of the Division. A new Job Vacancy Surveys Section was established in connection with the initiation by DBS of a program of surveys designed to develop measures of labour demand. The program of special labour force studies which originated in the Research and Analysis Section was transferred to the Special Manpower Studies and Consultation Staff and the activities of the Section revised to emphasize research oriented to the improvement of Labour Division data.

The Employment Section is responsible for the collection and publication of employment indexes, statistics of hours and earnings and labour income. Employment aggregates by industry and province are also produced on a regular basis.

The new tabulation and publication program introduced in the Section in January 1966 encountered some unexpected problems which resulted in temporary delays in publication in the early part of the year. In response to the expressed needs of provincial governments and others requiring sub-provincial detail the new program provides employment, hours and earnings data for a greatly expanded number of urban centres. The additional time involved in enlarging the detail in the monthly publications of the Section offsets some savings in timeliness which would otherwise have accrued from improvements in organization and programming.

Tests were initiated in the early months of 1967 to appraise the feasibility of automating the mailing and follow-up of the large-firm monthly employment and payrolls survey. The development of a program to computerize and automate the sample selection, rotation, mailing

and follow-up of the small-firm sample survey was also nearing implementation.

In co-operation with the Department of Labour, a small-scale mail survey of employer expenditures on selected employee benefits was carried out in May 1966. The survey demonstrated the feasibility of collecting "fringe benefit" data by mail. Accordingly arrangements were concluded to initiate jointly with the Department of Labour a regular program of surveys, the first of which will relate to the year 1967.

To ensure that statistics produced from the employment and payrolls surveys of the Section meet the requirements of users, a survey of subscribers to Employment Section publications was conducted in January 1967. Users were asked to comment on the series used, frequency and purpose of use, and to make recommendations for improvements. These recommendations will be studied from the standpoint of possible changes in the program of the Section.

Early in 1967, agreement was reached to undertake, for the Department of Manpower and Immigration and under a contract with that Department, a large-scale program of occupational job vacancy surveys. This program will develop information which would be used in determining selective policies regarding immigration, vocational guidance, and training programs for the unemployed. The results could also be useful in increasing the effectiveness of public employment service placement operations. The Job Vacancy Survey Section will be responsible for the processing, analysis and publication of statistics of job vacancies. The officer in charge of the Section will also be responsible for coordinating collection and interview operations conducted by field staff of the Special Surveys Division with the activities of the Job Vacancy Surveys Section.

As noted above, during the summer of 1966 the program of the Research and Analysis Section was reconstituted to emphasize projects related to the development or improvement of data produced in the Labour Division. Such projects will include investigations aimed at improving timeliness in monthly series, studies aimed at developing uniform concepts and definitions for various labour series, critical evaluation of alternative sources of data from the standpoint of elimination of duplication in collection of information. A start has been made on investigating possibilities for improving timeliness, and other projects will be undertaken when a new Chief of the Section is appointed.

The Unemployment Insurance, Pensions and Manpower Section is responsible for compiling statistics reflecting the operations of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration. In addition, an expanding pro-

gram of private pension plan surveys is carried on by the Section.

During the latter part of 1966, subject-matter experts of the Section took part in a series of meetings with the Unemployment Insurance Commission and the Department of Insurance to estimate the effects of proposed amendments in the Unemployment Insurance Act. These discussions involved the production of statistics regarding the additional number of persons who could be covered by possible changes in the wage ceiling. Advice was also given on the collection of statistics for persons in agriculture covered by unemployment insurance as at April 1, 1967.

A series of discussions took place with officers of the Department of Manpower and Immigration regarding statistics produced in the Section reflecting the operations of the Canada Manpower Service. In co-operation with the Department of Manpower, a new facsimile monthly report consolidating a number of existing reports was produced. It is anticipated that this report will be adopted as soon as certain problems involving changes in the procedure for registering persons with the Canada Manpower Service are solved.

Work was continued on the processing of returns received in connection with the survey of coverage of all pension plans in Canada taken in January 1966. The results of this survey will provide a variety of information concerning private pension plans including number and type of plans, number of persons covered, number of persons retiring on pension and some information regarding such persons. In addition, the copies of plans submitted with many of the returns will provide a basis for research studies into the provisions of certain types of plans.

A senior officer of the Section attended meetings of the Canadian Pensions Conference and held preliminary discussions with provincial delegates regarding the statistical programs to be developed by provinces in connection with new pension plan legislation. Discussions were also held with the Department of National Revenue and Department of Insurance regarding the possibility of joint arrangements for collection of information relating to pension plans in order to meet the statutory requirements of these departments and DBS statistical needs through a single return.

Senior officers of the Division presented papers at the Conference of Commonwealth Statisticians held at DBS in September 1966. The Division was also represented on the Canadian Delegation to the 11th International Conference of Labour Statisticians in Geneva, October 1966.

Manufacturing and Primary Industries Division

As a result of the departmental reorganization, the Division, while continuing to be responsible for the development and maintenance of programs of industry and energy statistics, is no longer administratively responsible for productivity research and analysis. The Section concerned with this work now forms part of the National Accounts, Production and Productivity Division.

Again this year the work of the Division reflected the emphasis placed on quality and timeliness of the various series. Of equal importance was the expanded service to users, particularly to the Department of Industry and provincial statistical agencies.

The Industry Statistics Section, which is responsible for the annual and current statistics of the manufacturing and primary industries, was able to achieve some further improvement in timeliness in the editing of the 1965 annual censuses of manufacturing and forestry. This resulted in a net gain of four weeks over that of 1964 which has now reduced the edit phase of these censuses to 12 months. Although still not satisfactory, this represents a saving of three months over that for 1963. The edit of the annual census of mining, however, has not progressed as expected due to problems related to the linking project for 1961 to 1963. These result from the inadequacy of reported data concerning "non-mining" activities for these years, necessitating considerable contact with respondents. The revised data are now expected to be available in late summer of 1967 rather than early in the year, as originally planned.

Although the linking project for the annual census of logging was completed during the past year, the revised "establishment type" data have not been released since subsequent analysis indicated that statistical comparisons between the "activity" and "establishment" data are questionable due to significant changes in the universe between the three years. It now appears that the linkage period must be brought forward to cover the years 1963 and 1964 when the logging universe became more stable. "Activity" type statistics are now being prepared for these two years and it is expected that the revised data will be published in the 1965 logging report later this year.

During the year a field officer was recruited and given intensive training in all aspects of forestry statistics prior to being stationed at Vancouver in March 1967. His main duties will be liaison with users and suppliers of statistics in the important forest-based industries of British Columbia.

The quinquennial survey of the primary fishing industry has progressed almost on sched-

ule with the collection phase 90 per cent complete. Editing of the returns received is proceeding satisfactorily and tabulations for the province of Quebec have been completed.

Again during the past year the Section was subjected to relatively heavy demands from the Department of Industry and in order to meet its requirements undertook five new surveys including a special survey on automotive parts and accessories involving over 1,000 respondents. In addition, four new surveys were undertaken on behalf of various industry associations and a revision of the Chemical Directory last issued as a reference paper in 1960 was completed. This will be published during the summer of 1967.

In the Energy Statistics Section, the refined petroleum products series was extended to include a presentation of fuel consumption by type and major use. Considerable improvement has been achieved in electric power disposition and use statistics and monthly data are now published for domestic, general service (commercial) and industrial use. With the increasing emphasis on small area statistics, improvements have been introduced in the following series providing statistics at the municipal level: *Electric and Gas Meter Registrations*, *Electricity Bills* and *Inventory of Prime Mover and Generating Equipment*. A new publication on natural gas bills will be of generally the same type and scope as the *Electricity Bills* report, providing small-area data on consumption, customers and rates for natural gas. In addition, coal and coke statistics are now available by economic regions or economic regional groupings. Finally, a survey of retail gasoline sales statistics was instituted on a quarterly basis for selected metropolitan areas.

In the Shipments, Inventories and Orders Section, the monthly estimates were revised to the 1964 base derived from the Census of Manufactures, and the basic framework of the survey was revised to provide for the publication of shipments by major industry groups for three provinces--Quebec, Ontario and British Columbia--and for two regions--the Prairie Provinces and the Atlantic Provinces. This will require the extension of probability sampling to all industries and the use of computer estimation. Subject to the availability of programming and computer resources and the co-operation of respondents in prompt reporting, the system will be implemented during the coming year and should result in improved timeliness as well as greater detail.

During the year the Analysis and Development Staff concentrated its efforts on improving timeliness and expanding the analytical content of the general (or all-industry) reports on manufacturing; on further development of the Industrial Commodity Classification; and on the

servicing of numerous and frequently complex inquiries for both the government and private sectors. All provincial reports for 1963 and an *Advance Statement* for Canada and the provinces, 1964, were issued. The latter also contained revised data for the 1961-1963 period for industry groups and provinces, together with statistics on the 40 leading industries in 1963 and 1964, ranked by value of shipments of goods of own manufacture.

Pending implementation of computer processing of the *Geographical Distribution* report, a series of *Advance Statements* on manufacturing statistics for sub-provincial areas was instituted. The first of these, providing all-industry totals by census division or county for the 1961-1964 period, was issued in March 1967. Preparation of the remaining two--all-industry totals for census metropolitan areas and selected cities, and individual industry totals for the seven largest census metropolitan areas, ranked by value of shipments of goods of own manufacture--was well advanced by the end of the year.

Extensive revisions were made to the draft version of the Industrial Commodity Classification (an adaptation of the Standard Commodity Classification) to incorporate, where practicable, suggestions received from other government departments and industry, and modifications for factors not fully provided for in the preliminary draft. Although these revisions will necessitate a postponement in the implementation of the classification, the resultant improvements in both structure and processing are expected to more than compensate for the delay.

Computer processing of statistical data was both extended and improved during the year. A system for processing the data collected in the survey of manufacturers' shipments, inventories and orders was specified and implemented. A very worthwhile beginning was made on a project to computerize the processing of most of the energy surveys during the next few years. Good progress was made with the development of computer programs to encompass the principal statistics of the primary industries. For example, the computer processing of logging statistics, begun in 1965, was extended and improved in 1966, and the required preparatory work done for inclusion of mining statistics in 1967.

A considerable amount of time and effort was expended in checking and revising the geographical coding of the establishments whose records comprise the computer tape files for manufacturing principal statistics. Precise geocoding in this and other areas is of the utmost importance in meeting the increasing demand for additional tabulations, by smaller geographical units, in greater detail. A concomitant problem is, of course, the avoidance of the

disclosure of confidential data, which becomes increasingly difficult with the proliferation of geographical levels of publication. The potential of the computer for assisting with the solution of these problems is being increasingly exploited.

Despite considerable difficulty and attendant delay, a computer program for the production of statistical tables was advanced to the point where it will be satisfactorily operative in 1967. The successful completion of this program will permit earlier publication of two reports of *Manufacturing Industries of Canada* series which have been delayed during its development, namely, *Geographical Distribution* and *Type of Organization and Size of Establishment*. It should also result in a substantial reduction in the time required for the future preparation of other publications through the elimination of many steps formerly required in manuscript preparation, vari-typing and proof-reading. It should be noted, however, that there is some concern regarding the availability of adequate programming and tabulating resources.

Merchandising and Services Division

The Merchandising and Services Division is responsible for the development and maintenance of a statistical program involving: (1) a quinquennial census of merchandising and service establishments, and (2) current surveys on a monthly, quarterly, annual or occasional basis, required to produce continuing estimates of sales, inventories and consumer credit, or financial aspects not covered in a Census, such as operating expenses, or broad areas of interest, such as advertising. Administratively, the Division is divided broadly into the two major survey areas: in the Census area, subject-matter and operations are combined, while in the Current area specialized subject-matter sections exist.

During the year all standard or fully-established surveys were maintained and reports issued. All outstanding bulletins from the Census of 1961 were finalized and released. In addition, a heavy new program was initiated in the Division involving definitional problems and new samples for consideration, design or implementation.

Work was commenced on the first Quinquennial Census of Merchandising and Service Establishments to cover the year 1966. As a major part of a program of modernization and amplification of the statistical product of the Division, approval had been secured to convert from a very detailed Decennial Census of Retail, Wholesale and the Service Trades to a streamlined Quinquennial Census, with post-census sampling for important detail previously associ-

ated with the Census, such as fine detail of commodities sold and a somewhat extensive section on employment. There had been an earlier decision, already acted upon, to develop an annual census-type survey of Wholesale Trade, leaving only Retail Trade and the Service Trades in the situation of having to rely entirely on the Census for a complete measurement and analysis of their universes. In making the earlier decision, however, it was explicit that in any Census year, the annual survey of Wholesale Trade should provide for Census data requirements; that a new listing of places of business should be secured for Wholesale Trade as well as for the Retail and Service Trades; that business shifts from one area to another should be studied as a single project, with common agreement on reclassifications; that there should be a maximum integration of processing, planning and activity; and further, that statistical releases in Wholesale Trade as well as in Retail and the Service Trades, should be in the form of standard Census bulletins, capable of being brought together into Census volumes.

As of January 1, 1967, the monthly retail trade statistics for the Independents' segment is based on a new sample designed from the 1961 Census. The January report is in a new format, sectionalized by provinces, in line with the increasing interest in provincial statistics. This report also contains revised estimates for the years 1965 and 1966 by kind of business and by province, to ensure maximum meaningfulness for the new series. Revisions for the years 1961-64 have been prepared and will be released in the near future. The two other segments of Retail Trade, Chain Stores and Department Stores, are covered in separate monthly surveys so that data on total Retail Trade may be available. The Chain Store Survey has been revised to conform to a new and more restrictive definition introduced in the Census of 1961, which provided the appropriate benchmark. The Department Store Survey has been revised slightly, to deal with some problems arising from the appearance of department store type Discount Houses, but a complete updating of this survey can only be achieved through the implementation of a new definition in the Census of 1966. This definition has been worked on for some two years, most particularly with the Department Stores themselves, and reflects a need to measure business done in a particular physical structure, the Department Store as seen by the public, against the business done in other competitive structures, such as the Shopping Centre.

During the year, a number of outstanding problems in the new Retail Voluntary Chain Survey were resolved. An adequate working definition of a voluntary chain outlet was developed and editing procedures were set up, permitting a considerable forward movement at the operational level. Discussions are taking place on the for-

mat design for the Voluntary Chain publication. A number of cross-tabulations are possible and these are being studied. It is proposed that the results from the Voluntary Chain Survey will be published in two stages, the first one being Food, the second non-Food. It is hoped that the publication on *Food Voluntary Chains* will be released by the end of 1967. The data will cover the years 1963, 1964 and 1965. The non-food segment of the Voluntary Chain Survey should be ready for publication about December 1967. Arrangements were made to secure necessary data for the year 1966 from the Census of 1966.

In addition to surveys limited to respondents classified to the three areas of Retail and Wholesale Trade and the Service Trades, the Division takes certain surveys which cross normal jurisdictional lines. An example of this is in the field of advertising where a new annual report was published during the year. This report brings together data from other DBS reports on *Printing and Publishing, Radio and Television Stations, Import Statistics, Advertising Agencies and Motion Picture Theatres*. A few small surveys are necessary to round out the picture which is necessarily presented from the media angle. The data thus presented do not include the internal costs incurred by such advertisers. To secure this cost, a special sample survey of about 20,000 advertisers is required at least once in five years; in-between years can be estimated. Such a survey is now almost completed for the year 1965. In taking this survey, it was clearly advantageous to ask the advertisers to report total costs, broken down into (a) billings against and (b) other internal expenditures. The latter permits the rounding out of the expenditure universe as available from the media angle annually while the sum of (a) and (b), *i.e.*, total expenditure by the advertiser, permits the calculation of advertising to sales ratios and the publication of these in considerable trade detail. In addition, the 1965 survey asked the advertiser to break down "billings against" into the significant media groups involved so that, for the first time, it will be possible to link the two in a trade, or industry, analysis.

Finally, the 1961 Census Monograph *Trends in Canadian Marketing* was up-dated wherever possible to 1965 and drafts sent to selected readers for comment. Reviews and useful suggestions have now been received, and the Monograph will be completed by mid-year, 1967.

Prices Division

Effective April 1, 1966, a reorganization of the Prices Division distinguished and brought under the control of two Assistant Directors, two main categories of price statistics, *viz.* Retail Prices and Living Costs, and Industrial Prices. Under the first are included the measurements of retail price movements and price

differentials as they relate to changes and differences in the costs of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies, securing and analysing cross-sectional data on family expenditures and family attributes. Industrial Prices, on the other hand, embrace measurements of price movements and differentials in the production and distribution of commodities and services in which the primary focus is on prices of the outputs and inputs of individual industries and groups of industries within the Standard Industrial Classification. In the reorganization, a third group, *viz.* Central Research Section, also was established to co-ordinate and integrate research and analysis in prices and to provide a small nucleus of specialists in methodology.

During the latter part of the year an interdepartmental conference was held to discuss the Prices Division's plans for an accelerated program for price statistics. The detailed plans for expansion of published price indexes, improvements in quality and reliability, and the development of an integrated framework for price statistics met with the general approval of a group of the main users. Providing resources are made available, this program will be launched in 1967.

In the 1966-67 period, the work program in the Retail Prices and Living Costs area has been related largely to the production and maintenance of the quality of existing price index series. Insofar as the national and regional city consumer price indexes are concerned, there has been some progress made in expanding and improving the collection of price data. These changes include the substitution of enumerative pricing for mail-in at some locations, and the addition of new cities such as Moncton, Chicoutimi and Corner Brook to the list of locations priced for inclusion in the national Consumer Price Index. Senior Officers of the Prices Division appeared before the Joint Parliamentary Committee on Consumer Credit (Prices) which has been looking into the reasons for recent rises in living costs.

In the field of family expenditure statistics, the year's activities were centred around survey processing, analysis and publication. Because 1966 was a census year, no expenditure surveys were undertaken. Results from the 1962 survey became available in the year and the publication *Urban Family Expenditure 1962* will be in print in 1967. This sample survey referred to the complete budget of urban families defined as those comprising two to six persons, with family incomes in the range \$3,000 to \$8,000.

Tabulations from the 1964 survey became available early in 1967, providing a large volume of cross-classified detail to serve pur-

poses related not only to revision of the consumer price index but also for research in expenditure patterns of various population groups. Because restrictions of family size and income were not applied in this survey, the computer processing program afforded an opportunity to test program specifications and classifications similar in scope to those required for a survey covering the whole urban population.

During the year, the International Prices Section processed and analysed surveys of retail price conditions being encountered by Canadian government personnel at forty foreign locations. Officers of the Section contributed to the work of the Advisory Committee on Isolated Posts regulations set up by the Treasury Board to review allowance policy with respect to federal government employees serving in remote areas of Canada. In continuation of the program of visits to foreign posts to assess living cost conditions, an Officer of the Section toured all centres in the Far East where Canadian government personnel are serving.

The work program in the Industrial Prices field in 1966-67 has been mainly directed to the production and maintenance of published price indexes, including quality improvements through the extension of price collection and the redesign of the price questionnaire.

Progress has been made, however, toward publication of a new price index relating to the construction and equipping of electric generating and transmission facilities, and revision of the commodities priced in the building materials indexes. The former index is expected to be published in 1967 and, relating basically to input costs, will cover materials, labour and capital used in transmission, distribution and transformation and switching facilities. Extensive commodity detail will be published and where possible regional data will be given. The revised building material indexes will be published during 1967 and will cover price movements more representative of commodities now included in the indexes. The revised price sample should also be capable of yielding some price information relating to regions.

The revision of the concepts, item content, weights and price samples relating to the Index of Prices Paid by Farmers (Farm Operation) continued throughout the year under review. Publication of the revised index, on a 1961 time base, is expected to take place late in 1967.

Transportation and Public Utilities Division

As part of the general administrative reorganization of DBS implemented January 1, 1967 Transportation was divorced from the Governments and Transportation Division and officially constituted the Transportation and Public Utilities

Division. The Division consists of three sections: the Aviation Statistics Centre, the Transportation Section and the Public Utilities Section. The former deals exclusively with aviation statistics including the work formerly done by the Transportation Section in this field, but also embracing the statistical work of the Department of Transport and the Air Transport Board. Transportation covers rail, road and water transport, while the Public Utilities Section covers radio and television broadcasting stations, telephone systems, telegraph and cable companies and community antennae (T.V.) systems.

On April 1, 1966 the Aviation Statistics Centre was organized, responsible to DBS but located within the Department of Transport, to provide statistics on behalf of the Department of Transport, the Air Transport Board and the Dominion Bureau of Statistics and to assume general responsibility for the production and development of aviation statistics. The Centre also provides special statistics for the planning and development of Canada's airports, air routes and airline services. It represents an extension of the provision of statistical services in keeping with the Glassco Commission recommendation for increased centralization of statistical activity within government. By putting the Statistical Operations Unit close to its primary users, the potential for increased accuracy and the timely meeting of special requirements can be realized. Through centralization of the collection and analysis of related statistics, economies of time and money can be achieved by eliminating duplication and providing integrated data.

At the present time, DBS statistics are confined to the Civil Aviation series concerned principally with financial and operational data of Canadian air carriers. Aviation statistics collected and compiled for the Air Transport Board and the Department of Transport cover station activity and traffic flow, origin and destination information, and aircraft movements. This large body of information forms the basis for airport development policies, the assignment of new routes and the negotiation of bilateral agreements. Along with the above program, the Centre has a commitment to develop a broad range of aviation statistics for the use of the general public.

One of the more immediate problems is to co-ordinate a number of DBS, DOT and ATB surveys which, to some extent, overlap in coverage and content. Methods of integrating these surveys are now being studied, in order to eliminate duplication, to reduce the burden on respondents, and to streamline collection and production. In the field of airport and aircraft movement information, a reorganization is under way to extend surveys to a number of municipally and privately operated airports. This should pro-

vide a measure of regional aviation activity. The requirement for forecasts indicates the need for development of historical series wherever possible as a basis for trend analysis.

In the field of rail transport, a project to develop a computer tape to facilitate conversion of railway freight data from the United States Standard Transportation Commodity Code (the code now in use) to the Bureau's Standard Commodity Classification is nearing completion. In addition to producing uniformly-based commodity data for all modes of transport and comparability with other DBS economic series, the SCC provides for a breakdown of certain items of commerce of regional significance, such as potash and plywood, not previously identified separately.

Another DBS-Rail Industry Committee has been established to examine all aspects of the rail statistical program including timeliness, periodicity, reporting forms, instructions, concepts and terminology. In connection with this work, two user surveys have been conducted, one to advise of the impending review and solicit ideas and suggestions which might assist in improving rail statistics, and the other to obtain user comments on the feasibility of publishing railway commodity data on a quarterly, rather than a monthly, basis. As a result of the latter survey, quarterly reporting for this particular series was inaugurated January 1, 1966.

During 1966 the financial and operating results of railways, which for some years had reflected different time periods in the same publication, were brought together on a same month basis. The present arrangement will facilitate direct correlation of the two sets of statistics.

Due to the continuing development by railways in Canada of new integrated services for small package freight and less than carload shipments, through the co-ordination and use of piggyback and other inter-modal transport techniques, a review of railway express statistics is to be undertaken at the earliest opportunity. An attempt is also being made to devise weekly estimates of rail ton-miles to supplement present weekly carloading statistics and thereby enhance the usefulness of this series as an important indicator of business activity.

The new transportation legislation (Bill C-231 passed by the House of Commons January 27, 1967), will undoubtedly have far-reaching effects on transportation in Canada. While the extent to which the present statistical coverage of the industry will satisfy requirements of the Canadian Transportation Commission is not known, it is expected that the Bureau will work closely with the new body to ensure that its statistical requirements will be satisfactorily met.

During the past year a major review of the Motor Transport Traffic Survey continued. A redesign has been proposed for coverage of the industry. The design is in two parts: a Truck Fleet Survey and an Individual Truck Survey. The former would be carried out on a monthly or quarterly basis (yet to be determined) while the latter would be carried out annually. The feasibility of incorporating commodity origin and destination statistics in the Fleet Survey will be actively explored. Target date for introduction of the revised methodology is 1969.

In co-operation with the provinces considerable progress has been made during the year in automating sampling selection procedures used in the Motor Transport Traffic Survey through use of computers, replacing manual selection of the quarterly samples.

Increased public awareness of the seriousness of motor vehicle traffic accidents has resulted in numerous demands being made upon the Bureau to convene a Dominion-Provincial Conference to review in particular definitions and concepts currently used by the provincial authorities for reporting purposes. The last such conference was held in 1954. A number of procedural steps are being undertaken by DBS preliminary to deciding whether such a conference should, in fact, be called. The Bureau is working closely with the Canadian Conference of Motor Vehicle Transport Authorities (CCMVTA) regarding this problem.

The Dominion Bureau of Statistics was officially represented on the Canadian Government Specification Board's Committee on Automotive Safety by the Transportation and Public Utilities Division. This Committee recently made public its *Guide to Traffic Safety*.

In the field of water transport, a major extension to the *Shipping Report* neared completion. Commodity flow charts, to become *Part VI* of this series, were prepared and charts for 1963, 1964 and 1965 will be released during the year. The charts graphically illustrate coast-wise and international movements in Eastern Canada of the eight high-volume commodities (wheat, other grain, pulpwood, iron ore, bituminous coal, gypsum, newsprint and fuel oil) for which origin and destination statistics are published in *Part V*. These charts, containing loading and unloading data by port and density flow lines, should provide a useful picture of interprovincial and regional trade in these commodities.

For the 1965 *Shipping Report* the selection of Canadian ports published separately was reviewed according to volume handled. As a result, a number of growing ports will be published for the first time. A similar review of the Canada-United States water-borne traffic revealed that about 75 United States ports handled

sufficient volume to warrant separate codes. Commencing in 1967, therefore, these will be identified and the resulting origin and destination tabulations will thereby be substantially expanded.

Research into certain activities directly related to water transportation such as steamship agencies, stevedoring and salvage firms was undertaken during the past year to judge the feasibility of undertaking new surveys to collect principal statistics in these areas.

For some years the Public Utilities Section has assisted the Department of Transport and the board of Broadcast Governors to obtain radio and television statistics. During the year, a written agreement which describes the procedure for the collection of data from broad-

casting stations as well as a procedure for the dissemination of information to users was formulated and approved by all three agencies.

The National Advisory Committee on Broadcasting Statistics assisted in improving the reporting schedules. Recognizing the importance of definitions in the expanding communications field, a subcommittee was formed to develop a Glossary of Terms on the Broadcasting Industry. Arrangements are nearing completion to begin a new series of statistics on the activities of community antennae television systems (cable TV) during the coming year.

Research on the feasibility of introducing surveys in the field of waterworks utilities and sewage disposal systems was also initiated during the year.

SOCIO-ECONOMIC STATISTICS BRANCH

In accord with the organizational changes of the Dominion Bureau of Statistics described in the introduction to this Annual Report, the Socio-Economic Statistics Branch was created January 1, 1967. The Branch is responsible for a wide range of demographic, sociological and economic statistics which deal predominantly with information about persons and families derived from household and institutional sources. They include the following: censuses of population, housing and agriculture; statistics on elementary, secondary, higher and adult education, vocational training and school finance; agriculture statistics; health, vital and judicial statistics; family income, assets and liability statistics. The Branch is also responsible for the field operations of DBS including the labour force survey, and eight Regional Offices, as well as for provincial liaison and consultative services.

Agriculture Division

The Agriculture Division, besides maintaining the established flow of data relating to all phases of the agriculture industry, was active in introducing changes needed to keep pace with new demands for statistical services. The rapidly changing structure of the industry, involving a continuous process of regrouping resources directly attached to the farm sector and in allied industries, has produced new and difficult challenges in the data collection and analysis field. The trend towards increased specialization has sharply magnified the differences in the allocation of resources between farms. Although the trend has been accompanied by greatly improved agricultural productivity, it has enhanced the data collection and sampling problems. As a result, the Agriculture Division is adopting more sophisticated sampling tech-

niques as rapidly as resources permit. Random sampling, specially tailored sampling frames, structuring of the universe into unique strata and related techniques are becoming integrated with and are being used to strengthen the historic methods of data collection.

The new statistical methods are necessary to provide data which will aid in the development of a more efficient allocation of resources, both at the farm level and by the growing number of industries now supplying inputs for the farm sector and the marketing and distributing of the increasing flow of output from farms. Methods for measuring net income flows to delineate social problem areas from the commercial sector of the industry, as well as methods to measure flows to various commodity groupings, are being considered in relation to needs for government policy formation purposes.

The Crops Section publishes a continuous and comprehensive flow of timely data and market information on field and horticultural crops in Canada. At the farm level much data is collected by means of mailed questionnaire inquiries of a sample of volunteer crop correspondents, seeking information on such topics as growing conditions, forecasts of acreage to be planted, probable yields and actual yields and farm stocks and quantities of grain fed on farms. Although published reports usually refer to provincial totals only, the data for many items are tabulated by smaller geographical areas and made available to provincial authorities.

In order to ingegrate material from farm surveys with other available detail on grains and oilseeds, two comprehensive reports, the *Wheat Review* and the *Coarse Grains Quarterly* are published. These publications collate and anal-

use national and international data and policy changes of importance to the production and marketing of the major commercial grain and oilseed crops. An expansion of the vegetable oilseeds occurred during the past year. Detailed data on the movement of Canadian commercial grains and oilseeds are published in the *Grain Statistics Weekly*. Historical data are made available for reference purposes in a series of handbooks and in the annual *Grain Trade of Canada*.

Due to the changing nature of marketing, especially for those commodities where producer and processor groups negotiate prices in advance of the harvest, there has been a growing demand for more precise early-season forecasts of probable production. Such data would help alleviate one of the variables in the negotiation process. As a start in meeting these rather difficult and precise requirements, the Crops Section has been developing a system of objective yield estimates. In co-operation with the Quebec Bureau of Statistics, apple counts have been under way in Quebec for a number of years and in 1964 the program was extended to sour cherries and peaches in the Niagara Peninsula of Ontario.

After two years' preliminary investigations using small samples it was possible to assess the size of sample required for an operating program and the coverage of sour cherries and peaches in Ontario was expanded in the summer of 1966. Activity was confined to the Niagara district for sour cherries but in the case of peaches some orchards in Essex County were included. In addition, some preliminary study of developing similar grape crop estimating techniques was undertaken. In 1966, at the request of the growers' group, a program was initiated to apply objective crop estimating techniques to apples in the Interior of British Columbia. This will be a two-year project on an experimental basis. Further pilot studies were carried on in introducing objective measurements to obtain more reliable early-season production estimates for Ontario winter wheat. Plans were made for extending this survey to a wider area in the province and introducing area sampling on a trial basis as a possible means of generating field crop acreage statistics.

A mushroom growers' survey was initiated on an annual basis and the first report published. New questionnaires were introduced for the greenhouse and nursery stock industries in response to changing economic and technological conditions. A new survey was introduced to secure earlier and more detailed data on the area and yields of the principal processing vegetables.

A pilot study to obtain fertilizer use by crops and by small areas was conducted for Saskatchewan and a report was released. Fertilizer use has expanded rapidly in the Prairie Provinces in recent years and there is a strong

demand for more data to describe the changes and effects of this major shift in farm practices. Farmers' intentions to use commercial fertilizer in each of the Prairie Provinces is now a regular feature of the early season information on field crops.

The Farm Finance Section conducted its regular semi-annual, large-scale sample farm surveys of crop acreages, livestock numbers and disposition, farm woodlot production and farm wages. Estimates were prepared and published for: indexes of farm prices and production; farm cash receipts and net income from farming operations; farm wage rates; farm capital; and the value of total agricultural production. Revised estimates of farm income and expenditures for the years 1950 to 1965 were completed and published during the year. These revisions were based on the most up-to-date information from private and government sources, including the Census of Agriculture and the 1958 probability survey of farm expenditure and income. They also include changes in methods of calculation which have been developed in recent years. A new edition of the Division's Handbook series which deals with farm income estimates was prepared and will be published early in the 1967-68 fiscal year. It will present estimates by component and by province for each of the years 1926 to 1965.

During 1966, all of the revised production data used in the revised income estimates were incorporated into the Index of Farm Production. This revised index, which still retains the time base of 1949 = 100, will be published for the first time in the spring of 1967. The construction of an index of physical inputs for the agricultural industry was initiated during the summer and it is expected to continue during the coming year. When completed, it should be a useful complement to the Index of Farm Production and provide the means for some further analysis of farm income.

Revised estimates of the value of farm capital were also completed for years 1951 to 1965 and a complete series for the years 1941 to 1965 published in the *Quarterly Bulletin of Agricultural Statistics*. Estimates of the value of agricultural production are in the process of revision and should be ready by mid-year 1967.

During the year, the Livestock and Animal Products Section undertook on a continuing basis two additional surveys, completed and published historical revisions on livestock and poultry statistics, and conducted operational research with the objective of improving livestock and poultry estimating procedures from sample data. One of these surveys is conducted on an annual basis and the second is monthly. The objective of the annual survey is to obtain data on the Canadian hair and fur seal industry and is the first attempt to gather data for estimating the

value of seal pelts for the four Canadian sealing areas, *i.e.* the North Pacific, the Northwest Territories, Quebec and the Atlantic Coast. Results of this survey were first published in the 1966 issue of the annual publication *Fur Production*. The purpose of the monthly survey is to provide an indication of the volume of frozen vegetables held in commercial storage facilities in Canada that are intended for remanufacture. Results from this survey were first published in January 1967 monthly report *Stocks of Fruits and Vegetables*.

The Handbook of Agricultural Statistics, Part VI, Livestock and Animal Products, brought together historical series on cattle, hogs, horses, sheep and lambs, with particular reference to numbers on farms, farm values and selected price series for the period 1871 through to 1965. The main purpose of this Handbook is to consolidate in one volume these selected series on livestock statistics for Canada and the provinces. The annual report, *Production of Poultry and Eggs*, was expanded in 1966 to include current estimates and revised series for the years 1955-1965. The purpose of this change was to incorporate into one volume all the revised data for that period. It is the intention to continue this practice in future to simplify user problems. The first bilingual version of this report was published in 1966.

Operational research was conducted on a continuing basis throughout the year in an endeavour to develop more efficient techniques for utilization of sample data for the preparation of livestock and poultry estimates. Results to date have not been conclusive, but techniques developed are expected to be more fully exploited when sample data are computerized. Selected data were provided to the central data bank which is operated under the auspices of the Central Data Processing Service Bureau, the Bank of Canada and the Economic Council of Canada.

In its regular program, this Section issued monthly reports on the output of dairy factory products, commercial fluid milk sales, milk production and its farm value, egg production, and on stocks of principal food commodities held in storage. In addition, quarterly reports were issued on numbers of pigs on farms and forecasts of farrowing intentions; semi-annual estimates of other livestock and poultry on farms; and annual reports of meat and wool output and domestic disappearance. The Section also issued comprehensive annual reports on livestock statistics, poultry and egg statistics, fur production and dairy and cold storage statistics.

Work in the Special Projects and Research Section during the past year was concentrated on completing the final drafts of two reports from the Farm Expenditure and Income Survey. A re-

search report entitled *Farm and Family Income, Farm Expenditure and Resources in Canadian Agriculture* was prepared with direct assistance from the Economics Branch, Canada Department of Agriculture. This study provided needed information on farm income, farm family income, farm expenditures and farm resources for three economic groups of agricultural holdings. Little information was hereto available on the distribution of income among farms and farm families, and the pattern of expenditure for different sizes and types of farms.

The other report, bearing the title of *Motor Vehicles and Machinery on Farms*, consists mainly of detailed statistical tables accompanied by the essential descriptive and explanatory material in the text. It will serve as a statistical reference or handbook. The tabular material is presented separately for each province. One group of tables contains detailed items for the numbers, values, operation and operating expenses for motor vehicles and power machinery, and the numbers, values and cost of repairs for other farm machinery. In a second group of tables, the farms (or land holdings) are classified according to the area of improved land, product type of farm, and cash receipts from sales of products and services produced by the farm. Within these classifications, the tables contain summary items of numbers, values and operating expenses for farm machinery and equipment. In addition, other selected items are provided to reveal certain farm characteristics which are relevant to the use and operation of machinery and equipment.

Work was started on compiling a new set of farm mailing lists based on information obtained from questionnaires completed for the 1966 Census of Agriculture. The main objective of this project is the production of a master tape file required for computer processing of the farm mailing lists. In addition to processing of the farm mailing lists, the master tape file will be used for the preparation of selected lists and classifications of farms for special surveys, and for research projects related to sampling and survey methods. A change in the method of addressing survey schedules will be introduced when the 1966 Farm Mailing Lists are ready for use. With the new method, addresses are produced by a computer on continuous folded paper, and an impression of the addresses is placed on the survey schedules by a heat transfer process.

Some preliminary work was started to examine the feasibility of applying computer processing methods to surveys conducted by the Agriculture Division. As a first step, a detailed flow chart of the present survey processing operation is under preparation by the Management Services Section with assistance from the Agriculture Division.

Census Division

The principal activity of the Census Division centred around the taking of the five-year Census of Population and Agriculture in June 1966 and the processing of the returns therefrom. A series of five preliminary releases was issued during the July to September period of 1966, giving provisional population counts for some 5,000 incorporated cities, towns, villages and municipalities across Canada. A complete catalogue of the 1966 Census publications was also issued. In the interests of economy and timeliness, provision was made for the use of computer print-outs as photocopy for printed reports in all cases (population and agriculture) where the computer programming could be adapted to this cost-saving method.

A field force of approximately 40,000 persons was required to take the 1966 Census of Canada. This task force had to be hired, trained and directed during a very short period of time. Seven manuals of instruction, totalling some 1,000 pages, were prepared in English and French for reference and training purposes. This material was used in a series of training steps in which nine master trainers from the Census headquarters staff instructed approximately 90 Regional Office Representatives located across Canada and who, in turn, instructed approximately 1,500 Census Commissioners. The Commissioners, in turn, selected and trained about 35,000 enumerators. In addition, training was given to approximately 1,300 temporary personnel employed in the Regional Offices and in Head Office to process the census documents, correct rejects from the machine edits and to prepare the material for publication. Approximately 200 tons of questionnaires, training material and office supplies were shipped from Ottawa early in May to meet the needs of Census Commissioners, enumerators and field staff.

Preparations for taking the Census included the delineation and description of some 38,000 enumeration areas and the preparation of individual maps of each area for the field enumerators. For tabulation and publication purposes, official groupings of the enumeration areas were prepared. These listings respect the federal electoral districts, as well as all provincial divisions and subdivisions. For the first time, detailed maps have been prepared for sale, showing enumeration areas within federal electoral districts, a number of rural municipalities and the census tracts.

At the close of the year, the tabulations for population, households and families, and agriculture were being checked preparatory to releasing the series of final reports on these subjects. Arrangements were being made to microfilm the population documents. To assist in the direction of the Regional Office processing, professional members of the Head Office staff were given specific training and then supervised

the processing of the returns in the eight Regional Offices. A number of methodological studies and quality checks were developed and conducted during the 1966 Census operations. Analyses of these studies are being made to assist in planning for future censuses.

In connection with the 1961 Census, a number of volume and special reports were completed and published during the year. These cover mainly subjects of the labour force, income and migration. In addition, considerable information, not contained in the published reports, was provided to meet specific requests from a wide variety of users on the subjects of population, agriculture, housing, households and families. These data were presented either in the form of computer tapes, computer print-outs, or manuscript copies. Considerable progress has been made on the writing of several 1961 Census monographs by university professors, with assistance from Census Division or Bureau personnel. Two of the monographs are presently being prepared for publication.

Some research has been carried out towards improving the 1971 Census. This includes tests of establishing accurate address registers for computer listing and addressing questionnaires for a "mail out-mail back" census. A machine-readable household population questionnaire is being developed for field testing. Definitions and concepts were examined and revised or reworded for use in a self-enumeration type census. A geocoding system, which identifies data according to a national grid and to block faces (in urban areas) is being studied. Such a system would facilitate the provision of data for any geographical area.

The regular series of reports on estimates of population and of families was continued during the year. The annual report on *Canadian Citizenship Statistics* was published, and statistical tables prepared for the annual report of the Citizenship Registration Branch, Department of Secretary of State. For the first time, projections of the number of families in Canada were made relating to the years 1970, 1975 and 1980.

The number of requests for verification of age from early census and national registration records increased by 11% to 54,000. This was primarily due to recent changes in the Old Age Security regulations, although there was also an increase in the number of requests from the Social Administration Offices of the United States.

Consumer Finance Research

During the year under review, the results of the 1964 Survey of Consumer Finances were published in *Incomes, Assets and Indebtedness of Non-Farm Families in Canada, 1963*. In addition

to income data, this survey collected data on consumer balance sheets in more detail than the previous surveys conducted in 1956 and 1959. A special feature of the survey was a detailed questionnaire on stock holdings and other corporate investments. It is planned to carry out more analysis of the data in 1967 and requests have been received from university researchers for access to the data collected for research purposes.

Another Survey of Consumer Finances was conducted in March-April 1966. For the first time the survey was expanded to include farm families so that the sample was representative of all families and not restricted to non-farm families as in previous surveys. In addition, some data were secured on the characteristics of family owned businesses. Results of the survey will be published in 1967.

Planning has begun on the next survey which will be carried out in the spring of 1968 and will collect data on the work history of individuals as well as income. It is hoped to expand the sample size from the present 12,000 to at least 30,000 households to secure intercensal data on the income distribution by provinces. In past surveys, the sample has not been large enough to provide statistics separately for the Prairie Provinces and the Atlantic Provinces. Because of the need for better provincial and regional data it is felt that one such large-scale survey should be undertaken to provide some improved inter-censal data.

The income monograph *Incomes of Canadians*, one of the series of census monographs, was completed and the manuscript will be ready for publishing in several months.

Publication of 1961 Census statistical reports on income was completed. In total, six reports were published in Volume IV of the Census series, as well as a special census tract report and eight special reports. One of the special reports contained an analysis of family characteristics and family income on an "economic family" basis which is conceptually comparable to family definition used in the Surveys of Consumer Finances and the United States censuses. A review article on incomes was also prepared for Volume VII (General Summary and Review) of the main census report. In addition, a substantial amount of unpublished census statistics was made available to users upon request.

A number of research projects were carried on which should be completed in 1967. Data had been accumulated several years ago from which quality checks of census income data could be attempted. Analysis was started of these data and a study of the conceptual consistency of census income and labour force statistics was initiated. A study is also in progress of the

characteristics of farm population by farm characteristics. This will be carried out from a match of a sample of 50,000 farm records with the corresponding census of population records. It is hoped that one of the by-products of the study will be data from which an evaluation can be made of the possible effect of changes in farm definitions upon farm population statistics.

More data have been accumulated on the misreporting of class of worker on labour force and census surveys and a report will be prepared on the subject. Recommendations have been made and accepted that this question be revised on census questionnaires in view of the experiences to date.

Education Division

Several forces operating during the past year will have future effects upon the work of the Education Division.

The federal-provincial conference on tax-sharing and on the financing of higher education held in October 1966 brought to an end as of March 31, 1967 federal support of the operating costs of the nine programs which have characterized vocational education over the past several years. Just what effect this will have on these programs as operated by the provinces, and consequently on the statistics of vocational education, remains to be seen. The conference was primarily concerned with transfers of funds to the provinces for the support of post-secondary education. In future this is to be at the rate of either \$15 per head of population or 50 per cent of defined operating cost. As a result, there will be a greater emphasis on both financial statistics and enrolment data for all types of post-secondary education.

Throughout the nation there is a growing emphasis on post-secondary and adult education, both academic and vocational, as evidenced by the establishment of new junior and community colleges, the growth of technical training, and an increasing number of adults seeking, by one means or another, to upgrade their education. All this requires change in emphasis and extension of education statistics.

Over the past few years there has been an increasing number of requests from a variety of sources for forecasts--especially of enrolment--of all levels of education. The most important of these requests have come from the Economic Council of Canada, and from regional and provincial councils and commissions. To meet them, a unit was established in the Division to establish the required historical series and prepare projections of enrolments for the use of the Economic Council.

During the year, the Elementary-Secondary Education Section has co-operated with the Ontario Department of Education to develop a common questionnaire for private schools which would provide the data required by both Ontario and DBS. In future the Ontario Department of Education Data Centre will be responsible for collecting the reports and processing them and will provide the Education Division with required tabulations. Publication of the two major annual publications of the Section: the *Survey of Elementary and Secondary Education* (1963-64) and the *Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools* (1965-66) was delayed in the absence of required information from two provinces.

The regular work of the Vocational Education Section includes the collection, processing and tabulation of statistics on eight technical and vocational training programs, six of which are monthly reports; and the collection, processing and tabulation of data on enrolments and staff in private trade schools and business colleges. During the year the *Survey of Vocational Education and Training* was published. This gave data for the years 1961-62 and 1962-63. In addition three reports were prepared for the Training Branch of the Department of Manpower and Immigration. These included: *Enrolment in Vocational Courses in Public Secondary Schools*, *Full-time Enrolment in Vocational Courses under Federal Provincial Agreements*, and *Full-time Post-Secondary Enrolment in Canadian Institutes of Technology*. In response to requests by education planners and others, questions relating to respondents' general education and vocational training were included in the November 1966 Labour Force Survey. The processing of these questionnaires is just getting under way and should throw considerable light on the education level and specific vocational qualifications of the Canadian population. At the end of the year tabulations on a survey of training in industry were nearing completion and publication should soon follow.

Despite the loss of the Chief of the Adult Education Section in mid-year, the normal publication program was maintained. During the year the *Survey of Adult Education*, 1963-64 was issued, Parts I and II of the annual *Survey of Libraries*, 1963-64 were published as well as preliminary releases on university and college libraries for 1965-66, and on median salaries of library school graduates. This latter material was prepared in view of the Canadian Library Association Conference in June.

A major revision of the publication *Organization and Administration of Public Schools in Canada* was completed and issued during the year. It has been adopted as a text in a number of universities. Offprints of chapters on individual provinces were provided for most provincial education departments.

A survey of *Canadian Education through Correspondence*, 1963-64 was published early in the year. In addition, the Canadian chapter for the UNESCO *International Guide to Educational Documentation* was prepared.

Projects in different stages of progress include a survey of special education in Canada, a survey of membership of Canadian school boards, and survey of the instructional staff in teacher-training institutions. A list of formal qualifications and certificates of vocational training granted by professional bodies, government and other agencies was prepared for Australian census officials.

The regular publication program of the Higher Education Section was delayed during the year. *Part I* of the *Survey of Higher Education* (Fall Enrolment in Universities and Colleges) was issued for 1965-66, and *Part II* (Degrees, Staff and Summary) for 1963-64. Beginning with the 1966-67 issue released during the year, *Tuition and Living Accommodation Costs at Canadian Degree-granting Universities and Colleges* became a regular annual publication. By the end of the year the 1967 edition of *Awards for Graduate Study and Research*, formerly prepared by DBS but by the Association of Universities and Colleges of Canada (AUCC) for 1963, was completed by DBS and in press. As in past years, two reports on university salaries, one on salary scales and the other on actual salary ranges, at about 50 institutions, were prepared for the Canadian Association of University Business Officers, and were subsequently reprinted in *The CAUT Bulletin*.

Much time was spent in working with officials of the higher education support branch of the Department of the Secretary of State and with other federal officials with regard to the Federal Government's new role, beginning in 1967-68 in financial assistance to post-secondary education; and with the AUCC in determining weighted enrolment counts for the distribution of 1966-67 federal operating grants to universities. A conference on higher education enrolment statistics, attended by university and governmental representatives, was held during the summer. Close contact continued with higher education associations. The Chief of the Section again prepared the chapter on "Education" for the *Canadian Annual Review*, and compiled background material, at its requests, for the report of the Committee on the Financing of Higher Education in New Brunswick.

The Finance Section is responsible for the publication of financial statistics of all levels of education of all types, as supported by all three levels of government and by private sources, as well as for statistics on the finances of vocational training and related cultural activities. In addition to its regular work, the Section prepared considerable data

for the federal-provincial conference on the financing of post-secondary education and subsequently further work was performed related to the preparation of the resultant legislation. Heretofore financial data on higher education has been based on returns from a limited number of the larger institutions who accounted for 80 per cent of the enrolment. Beginning with the survey for 1964-65, conducted during this year, coverage was extended to include the remaining universities and colleges.

A Manual of Accounting for School Boards which has been in preparation by a committee representing the provinces and DBS was published and quantities provided to the provincial Departments of Education for distribution to secretary-treasurers of public school boards.

There was a considerable number of requests requiring special compilations, particularly from universities and persons engaged in studies undertaken under auspices of either provincial or regional commissions or the Economic Council of Canada.

Health and Welfare Division

This Division is responsible for the production of statistics on the state of health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Three sections share the responsibility for producing statistics on health. The Vital Statistics Section is concerned with the events of birth and death, as well as with those of marriage and divorce. In particular, it carries out studies on natality, mortality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in hospitals and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in hospitals of every treatment type. It is also concerned with the incidence of a number of communicable diseases. The fourth section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions, the Penitentiary Service and the National Parole Board.

As in the past the Division published information on the medical, social and other characteristics of patients confined to general and allied special hospitals, and tuberculosis sanatoria. The Division issued a third report (1962) on morbidity in general and allied special hospitals and has undertaken an accelerated

program to produce the 1964, 1965 and 1966 reports by the end of 1967. The 1962 report shows detailed diagnostic information for nine provinces and is subdivided into age and sex groups; rates are shown for these population groupings. This work represents a significant addition to morbidity knowledge in Canada and constitutes the only available source of information in Canada for many conditions and diseases. Substantial information for disease research is also tabulated and stored in the divisional reference library to answer special requests for more detailed age-sex breakdowns than could be published. The Division also laid the groundwork for a publication dealing with surgical procedures carried out in the hospitals. In this area much valuable and currently unavailable information will soon become available for study in conjunction with the incidence of disease and the classification and utilization of hospitals.

Besides the work on morbidity in general and special hospitals, the regular monthly and annual reports on the incidence of tuberculosis were published. The Division was represented on a committee appointed at the Third National Tuberculosis Conference. On March 7, 1967 there was issued a glossary of definitions, standard terms and diagnostic criteria approved by the Department of National Health and Welfare, the Dominion Bureau of Statistics and the Canadian Tuberculosis Association, for use in chest clinics, hospitals and sanatoria, and by departments of health. An important innovation in the Tuberculosis field is that, commencing in 1966, information was also received on outpatient chemotherapy as well as inpatient treatment, making the compiled data much more comprehensive and useful in the study of this disease.

The Division issued weekly bulletins on the incidence of communicable diseases, for the benefit of public health authorities and exchange of current information with the World Health Organization, Pan-American Sanitary Bureau and the United States Department of Health. The figures of weekly incidence were later compiled into an annual report for the year. Tabulations of certain venereal infections reported to the Division were forwarded to the Department of National Health and Welfare for inclusion in a special report.

Many special time-consuming requests for morbidity information were answered. These came from federal and provincial government departments, from medical researchers, commercial concerns and individuals. The requests have varied in their nature. The information provided has ranged from data on hospital utilization to incidence of emphysema and lumbago and included special compilations for inclusion in special brochures for national studies such as one dealing with maternal and child health.

Tabulations requested by research specialists, governmental, and other organizations in the field of mental health were many and varied. Liaison with individuals and organizations concerned with mental health statistics in the provinces and in other countries, such as the Canadian Psychiatric Association, National Institute for Mental Health, and Provincial Directors, was greatly improved. Many valuable suggestions for the development of mental health statistics were obtained from these and other sources. An evaluation of current mental health statistics was undertaken, and as a result a thorough revision of *Volume I - Institutional Admissions and Separations* and *Volume II - Patients in Institutions* completed. New tabulations, designed to relate mental health statistics to the real world of patients, physicians, and hospitals were introduced, and also an expanded analysis of these statistics was offered to our users. A special report, clarifying the changes in patient characteristics in terms of age, sex, diagnosis and types of treatment facilities since 1955, was published.

A major development was the addition of approximately 50 Residential Treatment Centres for Emotionally Disturbed Children to the reporting system. This entailed a great deal of liaison work, including visits by DBS officers to each Centre, as well as planning in processing and analyzing new source of data. Planning for future development, including more complete coverage of mental health facilities, and improving the quality and timeliness of the data, received a great deal of attention during the year.

The Institutions Sections produced a wide range of statistics of general and allied special hospitals, mental institutions and tuberculosis sanatoria covering facilities available, services provided, personnel employed, training facilities and finances. Eleven annual reports are published to convey to the user the variety of statistics collected. These publications have been prepared since 1961. During the year, officers of the Section have had a number of meetings with officials of the Canadian Nurses Association and the Department of Manpower and Immigration. This has resulted in the initiation of a survey of salaries of graduate nurse personnel employed in the public, general and allied special hospitals. It is hoped that the results of this survey will be published in the fall of 1967. Information will show average and median salaries according to the employee's category in the hospital and qualifications.

Officers of the Section have been deeply involved in the revision of the Annual Return of Hospitals which will come into effect for the 1968 reporting year. These same officers have contributed much to the revision of the Canadian Hospital Accounting Manual which is used by all

hospitals in the country and assists in obtaining uniform statistics.

The Division met its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports, and by supplying the provinces with basic tabulations for births, stillbirths, marriages and deaths, as required under Dominion-Provincial Agreements. Throughout the year demands for information continued at the high level that has been reached for the past few years. These demands have come from public health officials, from education authorities, from individuals engaged in medical research, from manufacturing and distributing firms, from market research agencies and from other government departments, as well as from the public at large. Many of these demands represent requests for detailed analyses of current and historical records. More frequent this year than ever before have been requests for intensive investigations of the patterns of nuptiality and fertility. These latter requests have been occasioned by the recent drastic changes in the birth and marriage rates. New developments in hospital and medical care have added to the already considerable flow of demands for information on mortality due to particular causes. Most of these varied special requests required special calculations and compilations, as the information demanded was not available in any published form.

To meet a number of demands at once, as well as at the same time satisfying special interest groups, several analytical studies have already been published, and others planned. These studies relate to cancer, accidents, heart disease, foetal and infant mortality, nuptiality, fertility, and life expectancy. The reports all deal with the latest trends in these areas and seek to elucidate factors associated with the direction and magnitude of the trends. Besides a planned special life expectancy study, a series of annual life tables is being initiated, to serve as a general reference for those interested in survivorship, and for government and other bodies responsible for long-term projections and planning.

Since 1945, the Division, on behalf of the provinces and the Family Allowances Administration, has been preparing alphabetic registers of births, marriages, and deaths. It would be agreeable if this task, which is not directly statistical in nature, could be carried out by some other body; negotiations to this end, and investigations into suitable alternative methods of supplying the listings, have been continuing.

Processing of vital records in the Bureau is an expensive and lengthy process. Economies have already been realized by making arrangements with the five largest provinces to share with them the cost of producing basic statisti-

cal records. It was possible to make these arrangements because statistical procedures were standardized. Further economies, and even more complete co-operation with provincial authorities, should be possible once the vital statistics output flows from a specially written electronic computer program. In the meantime, to advance publication dates and to meet pressing demands for new statistics, the existence of a general-purpose program has been taken advantage of, and a large number of routine calculations are being carried out automatically by electronic equipment. With the availability of additional computer resources, these compromise tabulation arrangements are being replaced by a fully-computerized program.

Each year the Division provides the Vital Statistics Council for Canada with its secretariat service. In addition to work immediately associated with meetings of the Council or of its committees, the secretariat service is usually involved in the examination of a number of problems designated by the Council. Some of these problems relate to legal and administrative features of the vital statistics system, while others extend to the general sphere of social statistics. As an illustration, the Secretariat made arrangements, on behalf of the Council, for a full investigation and redesigning of the present registration forms used by the provinces, involving collecting views, summarizing opinions, and circulating results to all Council members. One of the objectives of this investigation was the standardization of content, size and format of the records used by all the provinces, subject to local legal requirements where some variation is inevitable. Since the records serve both legal and statistical purposes, provision must therefore be made for meeting both requirements. The anticipated benefits will be both administrative and statistical; there will be cost economies, a new convenience in processing, a new ease of record exchange, economies in storage of the forms, and other advantages for the provincial administrators. At the same time the statistical usefulness of the schedules will also have been thoroughly reviewed.

The Judicial Section is responsible for national statistics on law enforcement, the administration of justice and corrections, including crime, delinquency, traffic enforcement, police administration, adult courts at the trial and appeal levels, juvenile courts, penitentiaries, prisons and reformatories, training schools, parole and such continuing special studies as murder statistics. The Division put out twenty-one reports, statistical supplements, manuals and papers during the year bringing its Judicial Section publication program virtually up to date. All annual reports for 1965 were published except *Juvenile Delinquents* (1964) and *Statistics of Criminal and Other Offences* (1964).

The Division responded to the recommendation of the Department of Justice Committee on Juvenile Delinquency encouraging the Bureau to continue its efforts to integrate and improve the accuracy of its various statistical series on crime and delinquency by fully supporting these important objectives. Necessary changes in the responsibilities of officers of the Judicial Section were made and one officer freed to continue working on the development of integrated systems on a full-time basis. The project at its present stage, requires the development of systems which will integrate information on offences known to the police, offences cleared and how they were cleared, persons charged, disposition, results of appeals, admission of persons to correctional institutions or probation, discharge under varying circumstances of these persons and their subsequent encounters with the law on later occasions; in short a full statistical description of the process of dealing with offences, accused persons and offenders.

Intensive work was undertaken in one province in conjunction with senior provincial officials to develop an integrated system to meet provincial information requirements for administration, statistics and for research, as well as the Bureau's more limited requirements for data and statistical research. A pilot study of the system, as developed for the courts, was conducted. In a second province, developmental work is at a beginning stage, and discussions have been started with a third province.

The Division issued the second edition of its statistical report on Murder, which in itself was a pilot study of the integration of criminal statistics nationally. Two further pilot studies were completed and written up as papers. One of these, a five-year follow-up of inmates released from a Canadian penitentiary produced data on recidivism for the first time in Canada. The other study, an analysis of sentences imposed on inmates admitted to federal penitentiaries during the fiscal year 1965-66, produced important information on sentencing practices. Both these pilot studies were carried out as a part of the plan for developing a generally integrated system of criminal statistics.

The integration program was discussed in detail with the Chairman and members of the Canadian Committee on Corrections when they came to visit the Bureau in the course of their studies. They accepted the conclusion that an integrated system was the only accurate means of describing statistically the process and efficiency of justice.

Additional work undertaken involved the preparation and issuing of the French language edition of the revised *Uniform Crime Reporting*

Manual; translation into French publication and distribution of the Manual on Classification of Motor Vehicle Traffic Accidents; the extension of the man-hours tabulations for the Royal Canadian Mounted Police; the planning for the tabulation of assistance cases for the RCMP research and statistical staff and the revision of procedures to permit a continuing recidivist study on all persons released from federal penitentiaries. The operations staff was given training in the method of conducting the preliminary edit of the statistical returns for all series. This will release the co-ordinating staff to deal with the more serious problems by way of in-depth studies and by personal contact. At the request of the Department of Justice considerable preliminary work has been done on a proposed civil judicial statistics program. Annual tables for the reports of the Commissioner of Penitentiaries and the National Parole Board were prepared; special tabulations were prepared for Criminological Research Centres, government departments and for students and other interested persons.

Special Surveys Division

Through its eight Regional Offices, the Special Surveys Division is responsible for all field survey activities of the Dominion Bureau of Statistics. Current information on many topics is obtained by part-time interviewers working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 34,000 households across the country. Questions on labour force activity are asked each month and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five regions of the country. At the same time, information is obtained on rents to be used in the compilation of the rent component of the Consumer Price Index.

These interviews were used frequently during the year to obtain information on a variety of other topics as the basis for special studies. These included details of personal income (April 1966), household facilities and equipment (May 1966), smoking habits (September 1966), annual employment experience (October 1966), vocational and technical training (November 1966), immigration and education (February 1967), medical care received (March 1967).

Another important activity of the Regional Offices is the collection of monthly data on retail prices and the costs of services used in the compilation of the Consumer Price Index. Some hundreds of items or services are priced each month in representative outlets in the larger cities of the country. Adherence to strict specifications is required in commodity

pricing to ensure comparability of the index over long periods of time. Permanent staff of each Regional Office carry out the more difficult pricing and exercise close supervision over part-time pricing representatives who are being used increasingly in all centres.

Regional Offices have other functions such as the collection of business reports for almost all subject-matter divisions of the Bureau. Each office maintains a reference library of all DBS publications for the convenience of those wishing to obtain assistance or to refer to DBS data.

On June 1, 1966 enumeration commenced for the quinquennial Census of Population and Agriculture. Prior to the starting date of the Census, an augmented Regional Office staff had selected and trained, in co-operation with the officers of the Census Division, about 1500 Census Commissioners, supervised these Commissioners and indirectly some 35,000 enumerators who completed Census enumeration during the month of June. Large clerical staffs were employed in each Regional Office to receive, edit and process enumeration forms for transmittal to Head Office.

Provincial Liaison and Consultative Services

Most of the provincial capitals were visited by the Director of Regional Statistics and Analysis Staff and the Co-ordinator of the Provincial Liaison and Consultative Services, during the year, for informal discussions with provincial government statisticians and economists concerning present and potential regional statistical requirements and related matters.

Assistance was provided to various organizations on subjects ranging from assembly of information for specific regions like the North-western Quebec Economic Region, to consultation in the establishment of a questionnaire for the Division of Youth, Department of Education, Province of Ontario.

Consulting services were also provided to organizations such as Agriculture and Rural Development Act Administration (ARDA), the Area Development Agency (ADA) and the Atlantic Development Board (ADB) at the federal level, the Quebec Economic Council, the Royal Commission on Economic Opportunities in Newfoundland, the Department of Industry, the Province of Manitoba and several universities. The staff completed an analysis of a pilot survey on labour force for the Province of Quebec and carried out a manpower survey of Bell Island, Newfoundland, on behalf of the Atlantic Development Board. This survey was aimed at providing basic information to establish a plan of relocation for the population of Bell Island.

OPERATIONS AND SYSTEMS DEVELOPMENT BRANCH

The Operations and Systems Development Branch consists of two divisions and two sections all of which provide non-administrative services to subject-matter divisions. The Tabulating Services Division and the Central Programming Division provide a range of mechanical and electronic data processing services, and the professional skills and advice required for effective use of these services. The Management Services Section offers assistance in organizing that part of divisional work which can not economically be mechanized, and in transforming manual to mechanized operations. The Central Registers Section is developing a new central service: an integrated list of establishments classified by the Standard Industrial Classification and the Standard Geographical Classification, which is currently used to eliminate duplication and ensure completeness of particular divisional surveys, and which should eventually provide a basis for central mailing lists. The central services are being strengthened to increase their effectiveness in aiding the production of timely and detailed statistics and in facilitating the effective use of operational staffs throughout the Dominion Bureau of Statistics.

In addition to the divisional work described below, senior members of the Central Programming Division and the Tabulating Services Division continued to participate in the long-range assessment of DBS equipment needs. They served on a committee which studied DBS applications suitable for computer processing and assessed the computer facilities required. One result was that Treasury Board granted permission to up-grade one of the medium-sized computers now installed at DBS to carry the workload over the next 18 to 24 months. Studies continue of specifications for a possible new large computer to replace the obsolescent model now in use, and of alternative methods of preparing input for computer processing, with particular emphasis on optical scanning equipment now available and under development.

Tabulating Services Division

The subject-matter divisions of the Dominion Bureau of Statistics gather data which form the basis for statistical tables and the Tabulating Services Division provides the facility, using a variety of methods, to process the data and reduce it to more manageable form for further analysis or publication.

When a minimum of cross-classification is required, aggregates and averages may be produced directly as a clerical operation by means of peg-bar methods of compilation, using comptometers and desk calculators. Some 35 operators handle a considerable volume of data, particularly where monthly, quarterly, and annual tabulations of a repetitive nature consti-

tute a large part of the work. Many other special projects are handled on a recurring or non-recurring basis involving more complex calculation procedures.

Many DBS projects involve more complex cross-classifications which necessitate more difficult and rapid manipulations of the data. For these projects the Division uses:

- (1) a large key punch section with over 100 key punch/key verify machines;
- (2) a wide variety of unit record (punched card) equipment including sorters, collators, reproducers, interpreters, card proving machines and tabulators;
- (3) 1 medium and 2 small scale electronic computer systems.

During the year some 30 million punch cards were used in total, of which about 20 million were key punched by some 125 key punch and key verify machine operators. In January 1967 an evening shift was initiated, working from 7 p.m. to 10.45 p.m. (a half shift) to increase our overall production without an increase in space and machine requirements.

Editing of the data by mechanical means and seeking out inconsistencies which may arise through misinterpretation of instructions, definitions governing the collection of data, and errors in recording answers, are important functions of the unit record sections and computer centre. After errors revealed by the editing function have been corrected, and before the actual tabulation of totals, averages, medians, and percentages, the punched cards or records on magnetic tape must be sequenced, grouped and classified by the various characteristics of the data.

To an increasing degree, tabulations are prepared which can be used directly as photocopy for printing publications. This eliminates both the typing or vari-typing of data from rough tables and the proof reading of final copy. This method has been in use for a considerable time for statistics of external trade and has been extended to include tables for statistics of shipping, canals, penitentiaries, building permits, commodity index, stock inventories, and electric and gas meter registration.

Most of the time and effort of the Division is allocated to the work of the DBS. However, some requirements of other government departments and agencies have been accommodated on a cost-reimbursement basis and, on the other hand, the Bureau makes use of other computer facilities when time is not available on our own equipment or when our own facility lacks the required capacity. The DBS installation now con-

sists of an IBM 705 computer system, an IBM 1401 and an IBM 360/30 computer system and peripheral equipment. Throughout the year the computer centre operated on a 3-shift, 24-hour day, 5-day week basis with some week-end work to maintain schedules and meet deadlines, yielding some 5,300 productive hours on the 705 system and 12,600 productive hours on the 1401/360 systems. Over 4 million sheets of original tabulations were produced in the year under review.

This being a "quinquennial census" year, about $4\frac{1}{2}$ million documents were written on to magnetic tape by the 'Document Reader'. At the end of the fiscal year, processing of this data was under way in the computer centre.

Central Programming Division

The Central Programming Division develops the systems and technical instructions which permit DBS work to be processed on electronic computers. The establishment strength of this division at March 31, 1967 was 59 with all positions filled. This is the first time in several years when there were no vacancies at the end of the year. Experienced programmers continue to be in short supply but recruitment of trainees through the Public Service Commission was successful. Requests for programming services continued to be greater than the supply.

During the year a total of 544 new computer programs were written as well as maintenance on continuing systems. Programming for volume requirements of the 1966 Census of Canada was completed.

Programs written by the Scientific or Mathematical Processing Section continued to be mainly for the Sampling and Survey Research and Econometric Research Divisions although there is a noticeable trend toward increased requirements for the Current Business Indicators, Regional Statistics and Analysis, and Health and Welfare Divisions.

Resources in the Data Processing Section were distributed 22 per cent for the Census Division, 74 per cent for other DBS Divisions and 4 per cent for outside agencies. This 4 per cent is a significant drop from 8 per cent in the previous year. There are two reasons for this decrease. Firstly, special requests for 1961 Census tabulations had to be curtailed in order to concentrate on 1966 Census programs. Secondly, programming requirements for processing Federal Government Employment and Pay Research Bureau surveys are in the process of being transferred from the Central Programming Division to the Financial Statistics Branch.

Conferences and seminars were attended in Montreal, Miami and Geneva. Visits were made to Washington, Seattle, Toronto, Chalk River and Edmonton in connection with specific projects.

Management Services Section

The Management Services Section was established in the latter part of 1965 to provide a departmental consultative service for improvement in the utilization of production staffs. Considerable effort was spent initially on the recruitment of staff, and by the end of the 1966-67 fiscal year a satisfactory staffing level was reached.

Several significant study projects were undertaken and completed during the year. These include: replanning of the Consumer Price Index monthly survey to facilitate computer processing; development of an integrated judicial reporting form for joint use by the Quebec Department of Justice and DBS; development of a mechanized system of personnel records to aid personnel management, recruiting and budgeting; determination of staff requirements based on workload and development of a revised organization structure for the Publications Distribution Unit of DBS.

Projects which were in progress at the end of the year include; studies of the records management requirements of the Census and other divisions for the purpose of developing suitable information storage and retrieval systems; a workload study covering the Education Division; the establishment of production standards for typing irregular tabular material; planning of physical facilities and clerical procedures for the Central Personnel Records System; functional reorganization of the Personnel Section to reduce manpower requirements; and a study of the manual processing procedures in the Agriculture Division for the purpose of assessing the feasibility of mechanization.

Central Registers Section

The Central Registers Section administers and develops the DBS Central List of Companies and Establishments, which provides a basic record of the firms which should be included in individual DBS surveys. The Central List numbering system was adopted during the year for several surveys in the Business Finance Division, Merchandising and Services Division, and the Health and Welfare Division. At the close of the year under review its adoption by other surveys in these divisions and in the Education Division was being initiated.

Investigation and resulting clarification of inconsistencies in the Central List continued. During the year 450 such problem cases were cleared and there was a remaining backlog of some 250 cases requiring solution. Because of continuing mergers, expansion and re-organization in business, it is unlikely that this backlog can be reduced by any significant amount. In addition, regular maintenance of the Central List record required 30,000 additions,

11,000 deletions and over 72,000 revisions of existing records due to changes in name, location, activity or establishment breakdown.

Interest increased in the use of the Central List record for industrial classification by government departments and agencies and by business. The numbering system used in this record is also being examined by industry as a possibility for establishing a standard "vendor code" system in business.

During the year it became evident that the existing abbreviated record on magnetic tape was inadequate to accommodate the demands made on the Central List. Accordingly, an outline of a sys-

tem for enlarging the tape record was developed. The new system will be fully automated and is capable of providing unique identification and uniform industrial and geographical classification of all DBS respondents and of identifying each DBS survey covering a respondent or reporting unit.

The co-operative arrangement continued with the Unemployment Insurance Commission whereby their local offices collect a Nature of Business Report from all new registrants. This has proven to be the major source of information necessary to keep DBS survey lists up-to-date. It results in the semi-annual publication *New Manufacturing Establishments in Canada*.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including administration, staff organization, financial control, publications distribution and office services such as the addressograph unit, drafting unit, stenographic pools, supplies, mail and messenger services.

Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Organization and Personnel Sections. In carrying out these functions it is necessary to maintain close liaison with the Public Service Commission on recruitment, pay, promotions, transfers and related matters.

The staff employed on continuing operations on March 31, 1967 numbered 2,459, an increase of 211 from the number employed on March 31, 1966; and there were 236 term employees on the Census staff on March 31, 1967. During the year, 81 statisticians and economists were recruited and 44 were separated. During the summer of 1966, 54 research assistants were employed on summer projects. Throughout the year 248 promotion competitions were conducted.

Casual clerks were recruited for compilation work on the 1966 Census up to a maximum of 331 in head office for the month of July, 1966. This number was reduced to 52 by March, 1967.

The establishment authorized for the fiscal year was 2,663 continuing positions and 722 man-years of casual clerical assistance including 574 for 1966 Census work.

The Health Unit, a branch of the Public Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

Staff Development and Training

An extensive training and development program was implemented over the past year and included departmental, Public Service Commission and out-training courses. In the past year the emphasis has been on non-professional training.

The Public Service Commission annually conducts courses in government administration at three levels--junior, intermediate, and senior. This department took advantage of the junior level course and sent six junior officers for training. Because of the large numbers of managers to be trained, the DBS training office organized departmental managerial development courses for the junior and intermediate levels. Fifty-four DBS supervisory personnel graduated from the junior course this year. The intermediate level course will commence in the fall of 1967. For senior management, the department conducted a one-week seminar in Cornwall, Ontario. Its objectives were to familiarize the senior managers with the new personnel and financial management philosophies in the Public Service resulting from latest legislation. Twenty-eight personnel from the directors to the Dominion Statistician levels attended.

In addition to the management development courses, there were other courses organized to instruct line managers in specific techniques: sixteen attended a Divisional Administration Officers Course; forty-six attended a Job Analysis and Job Evaluation Course; sixty attended Computer and Data Processing Courses.

With the expansion of the Public Service Commission language training facilities this year, DBS was able to enroll 102 personnel in the French and 17 in the English courses.

During the year, twelve External Aid trainees from nine countries spent from two weeks to one year at DBS, participating in vari-

ous External Aid programs. These trainees came under fellowships granted by various Canadian Aid programs as well as United Nations and Pan-American Health Organizations.

Twenty-five personnel qualified for 50 per cent reimbursement of registration fees for evening and correspondence courses this year. Three junior statisticians were on educational leave with an allowance equivalent to half-pay to pursue post-graduate degrees in Economics and Statistics.

Training and development is expected to increase in importance because of the growing demands being made on managers and the complexity of new technologies with which they must deal. It is hoped that in the coming year more training for the professional staff will be available.

Incentive Awards

During the year, 32 suggestions from DBS employees were considered by the Incentive Award Committee of which 10 were carried forward from the previous year. Of these suggestions, 10 were approved for awards valued at \$377.50 with an estimated saving to the Bureau of \$5,050. At the end of the year nine suggestions were still under investigation.

Financial Services

This Section has two main functions, one concerned with the financial operation of the Bureau including the co-ordination of the program review and estimates. The second is concerned with the sale and distribution of DBS publications.

The Accounts Unit examines and controls expenditures, audits travel claims and commercial accounts, maintains a budget reporting system and interprets financial regulations. During 1966-67 a start was made on reorganizing the accounting system and estimates procedure to give emphasis to the statistical program aspects of the operation and to set up accounting responsibility centres in line with the various activities.

The Publications Distribution Unit maintains current mailing and subscription lists for distribution of publications. During the fiscal year 1,411,571 pieces of mail were dispatched and 21,288 mail orders were received. The subscription mailing list now contains 175,111 mailing plates.

Office Services

As of March 31, 1967, Typing and Transcribing Services included four Typing Units located in DBS, one in No. 8 Building to service the Census Division, and one (established in May 1966) in the Kent-Albert Building to service the

Aviation Statistics Centre. The number of lines (or equivalent) produced in all Units during the fiscal year totalled 7,832,516. In addition, staff assigned to particular areas produced 1,087,533.

The Printing Liaison Services Unit, in addition to maintaining liaison with the Variety and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications. During the 1966-67 fiscal year, this unit processed and prepared 15,400 pages of copy for printing.

The Drafting Unit prepared 2,625 graphic illustrations by means of charts, maps, displays, publication covers and pamphlets, for the Divisions of the Bureau and other Departments and Agencies of the Government, an increase of 9.4 per cent over the previous year. In addition, the Unit completed a series of 42 charts for the Royal Commission on Health Services.

In the Forms Design Unit, the continuance of the trend toward more extensive use of mechanical equipment and automated data processing in the production of statistics has resulted in additional time being spent on analysis and development of such forms. During the year under review, the Unit processed 3,356 forms comprising 9,649 pages of reprints, revisions and new or redesigned forms; 690 specialty forms and envelopes were prepared and 2,287 other miscellaneous printing jobs, comprising 29,609 pages, were processed.

In the Addressograph, Mail and Supplies Unit 18,595,216 forms were addressed for the various divisions of the Bureau. In addition 216,934 plates were embossed, 124,693 corrected and 320,097 deleted. In addition 200,700 pieces of mail were enveloped by hand and 3,291,316 were inserted by machine. Late in the year, the Unit acquired a heat transfer printer which will accept addressing jobs based on computer-originated address listings.

During the year 25,882 bags of mail were deposited with the Post Office and 10,968 were received. In addition to mail for delivery in Canada, 18,632 pieces of registered mail, 19,875 air mail, 1,190 special delivery, 6,116 parcel post and 99,149 foreign mail were dispatched. Also included in mail dispatched were 1,840 bags containing 4,401,069 letters for the Department of Agriculture.

The Supplies Unit submitted 1,221 printing and stationery requisitions to the Department of Defence Production, for an estimated value of \$716,150. The supplies inventory as at March 31, 1967 was \$39,336; the annual stock turnover rate, therefore, was 18.2. Replacement value of DBS office machine and equipment inventory, based on original cost, was \$771,516.

DOMINION BUREAU OF STATISTICS SENIOR OFFICERS

Dominion Statistician Walter E. Duffett

Assistant Dominion Statistician (Integration and
Development) S. A. Goldberg

Assistant Dominion Statistician (Administration,
Finance and Personnel) H. L. Allen

Director General (Operations and Systems Development
Branch) L. A. Shackleton

Assistan Dominion Statistician (Socio-Economic
Statistics Branch) L. E. Rowebottom

Director General (Economic Accounts Branch) C. D. Blyth

Director General (Financial Statistics Branch) G. A. Wagdin

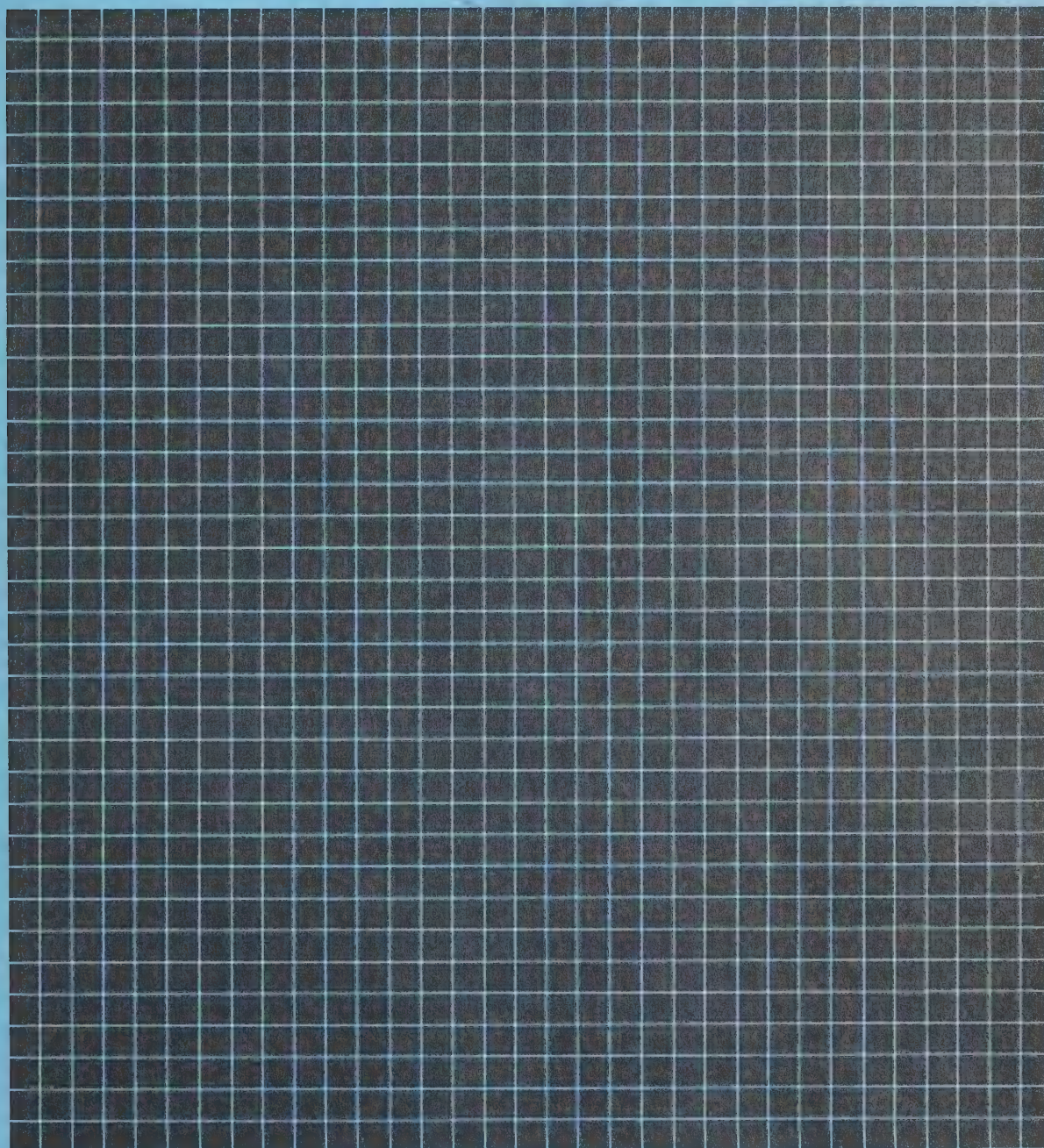
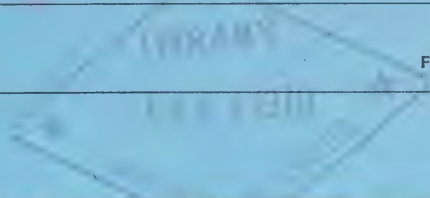
Director General (Economic Statistics Branch) V. R. Berlinguette



Dominion Bureau of Statistics

Annual Report

For the Fiscal Year ended March 31, 1968



CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1968

March 1969
0001-502

The Queen's Printer, Ottawa

THE HONOURABLE JEAN-LUC PEPIN, P.C.,
MINISTER OF INDUSTRY, TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the
Dominion Bureau of Statistics covering the operations and
services rendered during the fiscal year ended March 31, 1968.

Respectfully submitted,

Robert G. Duffett.

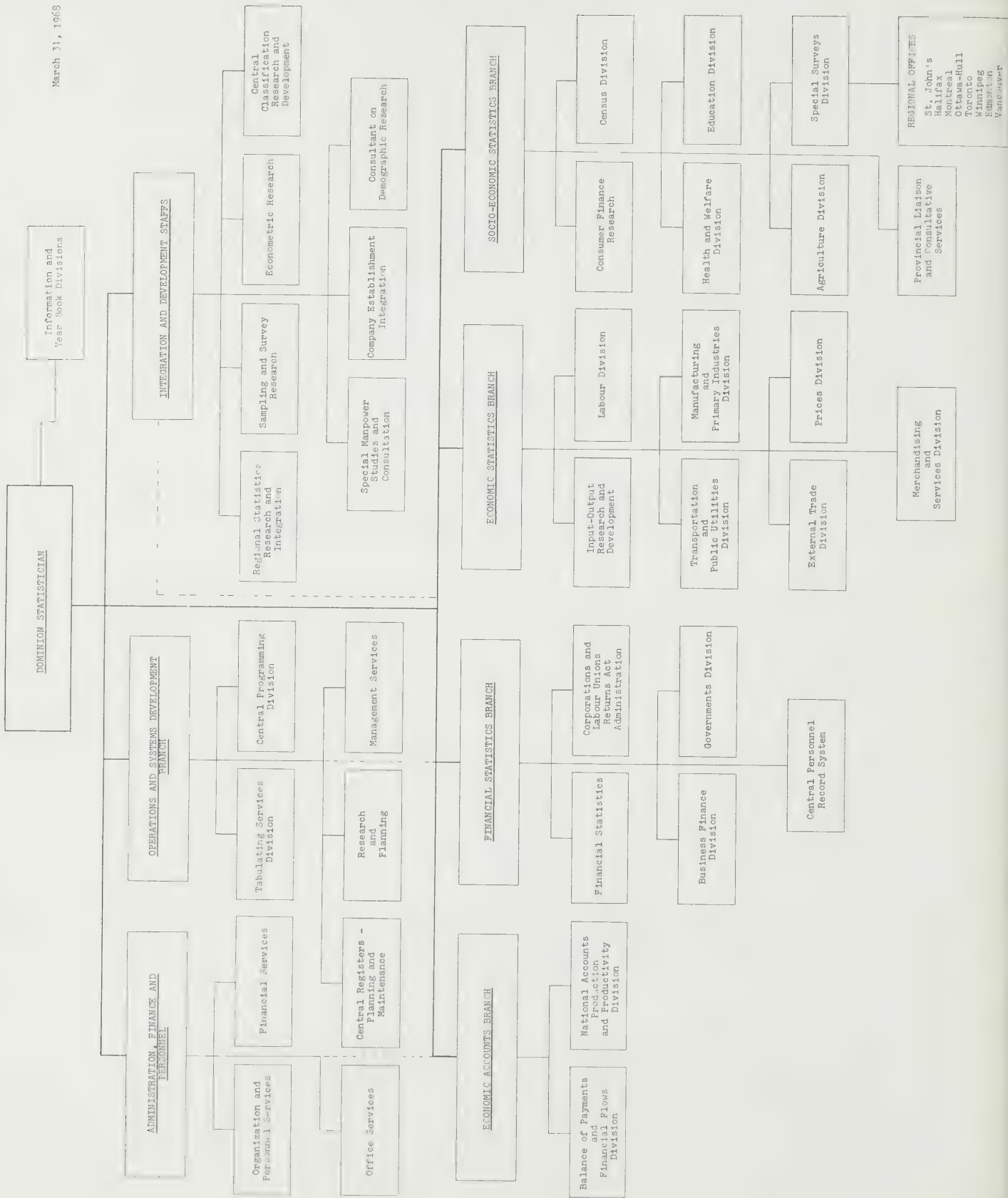
Dominion Statistician.

Ottawa, Canada
March 1969.

CONTENTS

	<u>Page</u>
Chart of the DBS Organization	6
General Activities	7
Canada Year Book Division	8
Information Division	9
Integration and Development Staffs	
Central Classifications, Research and Development	10
Sampling and Survey Research	11
Econometric Research	13
Regional Statistics, Research and Integration	14
Company Establishment Integration	14
Special Manpower Studies and Consultation	16
Consultant on Demographic Research	16
Economic Accounts Branch	
Balance of Payments and Financial Flows Division	16
National Accounts, Production and Productivity Division	17
Financial Statistics Branch	
Financial Statistics	18
Business Finance Division	18
Central Personnel Record System	22
Corporations and Labour Unions Returns Act Division	22
Governments Division	23
Economic Statistics Branch	
External Trade Division	24
Input-Output Research and Development	25
Labour Division	25
Manufacturing and Primary Industries Division	27
Merchandising and Services Division	28
Prices Division	31
Transportation and Public Utilities Division	32
Socio-Economic Statistics Branch	
Agriculture Division	35
Census Division	36
Consumer Finance Research	37
Education Division	38
Health and Welfare Division	39
Special Surveys Division	43
Provincial Liaison and Consultative Services	44
Operations and Systems Development Branch	
Tabulating Services Division	44
Central Programming Division	45
Management Services Section	46
Central Registers Section	46
Administrative Services	
Staff Organization	47
Staff Relations and Evaluation	47
Staff Development and Training	47
Staff Classification	48
Incentive Awards	48
Financial Services	48
Office Services	49
Dominion Bureau of Statistics Senior Officers	50

March 31, 1968



GENERAL ACTIVITIES

The fiscal year under review included the hundredth year of Confederation and brought the Dominion Bureau of Statistics within sight of the fiftieth anniversary of its own foundation, May 24, 1968. Demand for statistical services continued unabated and significant innovations in statistical techniques and planning were introduced or were in prospect at the year end. Canada's Centennial year was marked by the appearance of a handsome volume, *Canada One Hundred 1867-1967*, produced in the Canada Year Book Division, with a printing of 500,000 copies and widespread distribution.

The reorganization of the Dominion Bureau of Statistics which had taken place January 1, 1967 required adjustment of some established procedures and methods of communication but soon settled down and facilitated numerous important developments, such as the re-allocation of positions under a staff freeze which lasted from March 1, 1968 to June 12, 1968. Once the freeze was removed, efforts were resumed to fill vacant positions to full-fill urgent statistical programs. As in previous years, shortages of experienced personnel continued, although some increase was noted in the supply of professional staff at junior levels. In defining more precisely staff requirements for the future, and in accordance with the needs of Treasury Board, program plans are being extended further into future years than has been done up to the present.

Growth of DBS in recent years has necessitated the moving of most of the staff of the Socio-Economic Statistics Branch, including the Census, into two buildings some miles away from the headquarters building. Even a small separation of this nature creates problems of communication, and special efforts have been made to preserve so far as possible the advantages of a centralized and coherent statistical Bureau. Plans are under way for a new DBS building, to be completed in 1971, which will accommodate, in one location, all DBS staff.

The prospects of new technological changes, growth of the Bureau, and the availability of relevant expertise outside of DBS, have all led to greater use of expert consultants, especially in computer matters, and the employment of university staff members to undertake special tasks. Experience has been generally satisfactory and the practice seems likely to grow.

The more urgent, practical and precise needs of users continue to highlight the importance of timeliness and important progress was made in such broad areas as trade statistics and the index of industrial production. The timeliness program will be extended as rapidly as possible.

Preparations for the 1971 Census have included experimentation with self-enumeration and other new features. This experimentation included a major test in London, Ontario in September 1967. In developing geographical coding and other new features, the Sampling and Survey Research Staff has contributed a number of important and novel features. It is expected that the use of new document reader and computer equipment will lead to significant improvements in timeliness and service to users in 1971, which will be of particular interest to groups concerned with regional and small area statistics.

Close collaboration with provincial statistical offices and local users continued. In May 1967, an important Federal-Provincial Conference on Economic Statistics took place and led to the development of a number of active, specialized, continuing committees on legislative and statistical topics. The development of small area intercensal statistics continued in DBS, with initial emphasis on population, employment and income.

One of the few large new surveys undertaken in recent years was initiated in March 1967 with the signing of a large contract (itself an innovation) with the Department of Manpower and Immigration for a new continuing survey on job vacancies. This new survey, developed from the beginning, offers an opportunity to utilize the most modern technology and involved co-operation of a considerable variety of specialized skills from within DBS.

Among staff changes during the year was the loss through retirement of Dr. C. C. Lingard, Director and Editor of the Canada Year Book and Mr. F. J. Rashley, Director of the Merchandising and Services Division. Their counsel and contribution to the efficient operation of the Bureau were greatly appreciated. At the same time DBS welcomed the appointment of two new Directors-- Mr. Pierre Joncas, the new Director and Editor of the Canada Year Book and Mr. Gerald Snyder as Director of the Merchandising and Services Division.

The year was featured by growing pressures on DBS, and especially on experienced DBS personnel, arising not only from statistical programs but also from requirements related to new government-wide developments such as the redefinition and reclassification of staff positions, the beginning of the program budgeting system and the diversion of increasing numbers of staff to language courses. The maintenance and growth of a quality statistical program in such circumstances has been possible only through the dedicated and willing efforts of the DBS staff at all levels.

CANADA YEAR BOOK DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two basic reference reports, the *Canada Year Book* and the handbook *Canada*, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study.

The compiling, editing and printing of the *Canada Year Book 1968* extended throughout the fiscal year and it was anticipated that the English edition would be completed about June 30, 1968 and the French edition two months later.

During the fiscal year 500,000 copies of *Canada One Hundred 1867-1967* (*Canada un Siècle 1867-1967*), the Division's special issue of the handbook *Canada*, designed to commemorate the centennial of Canadian Confederation, were sold--establishing a Canadian record for book publication. A Spanish edition of *Canada One Hundred 1867-1967* was prepared for publication and was in the hands of the printer at the close of the fiscal year. The official handbook *Canada 1968* is expected to be released in both official languages by October 1968.

The Division assumed responsibility for publication of the 1961 Census Monographs--receiving manuscripts from the authors, planning the format of the series of volumes, the design and page layout of text, tables and charts and the selection of type faces. During the year the following volumes were edited, proof-read and processed:

1. Labour Force Studies:

- (1) *Historical Estimates of the Canadian Labour Force* by F. Denton and S. Ostry (in English and French);
- (2) *The Occupational Composition of the Canadian Labour Force* by S. Ostry (in English with French under way);
- (3) *Provincial Differences in Labour Force Participation* by S. Ostry (in English with French under way);
- (4) *Unemployment in Canada* by S. Ostry (in English with French under way);
- (5) *The Female Worker in Canada* by S. Ostry (under way in both English and French);

2. *Tendances et Facteurs de la Fécondité au Canada* by Jacques Henripin (in French with English under way);3. *Urban Development in Canada* by L. O. Stone (English);4. *Trends in Canadian Marketing* by M. S. Moyer and G. Snyder (English);5. *Incomes of Canadians* by J. R. Podoluk (English under way).

The Information Division prepared cover designs for each volume and undertook promotion of sales and distribution in co-operation with the Queen's Printer.

Focussed around the Canada Year Book coverage of authoritative Canadian data, the Division supplied regular series of statistics for the United Nations Statistical Monthly Bulletins, the United Nations Statistical Yearbook and the International Labour Office, and in addition provided up-to-date revisions of Canadian statistical and textual material for many standard national and international reference works as well as dispensing current and historical data in response to multi-subject inquiries received by the Bureau.

The Library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff, research workers and the general public. It also has an extensive collection of statistical publications received on an exchange basis from many countries.

Because of the substantial increase in professional staff in the Bureau during the past few years, the demands have taxed the services of the Library staff which has not increased in the same ratio. Priority has been given to acquisition of materials to meet this demand and two persons devote their time solely to purchase and other acquisitions of material. To indicate the increased volume of purchases, \$26,000 was spent for the fiscal year under review, compared with \$22,000 and \$15,000 for the two previous fiscal years.

Heavy demand was made on the Library, also, by officials of other government departments, academic staff and students of universities, as shown by an increasing number of users of the Library and inter-library loan requests. The Library also borrowed on inter-library loan a large number of publications from other libraries for the use of Bureau staff. The Library has been actively assisting the Inquiries Section of the Information Division in handling requests from the public by providing information from library resources and obtaining material for inclusion in a non-DBS publications reference collection for the Division.

The Historical Catalogue of DBS Publications, 1918-1960 was published in March 1968.

In co-operation with the National Library and Public Archives, it is now planned to make available in microprint form, out-of-print publications listed in this catalogue.

Because of staff restrictions being applied generally in the public service, the Library has not made the expected progress in

development of new services and application of mechanized systems which was mentioned in the previous annual report. However, with approval of the purchase of a microfiche reader-printer and other equipment for the 1968-69 fiscal year, it is hoped to make a start in the development of some of these services in this period.

INFORMATION DIVISION

Further advances were made during the year by each of the four operating sections of the Division:- Publicity, Statistics Use Development, Inquiries and Publications Service. Activities sought to extend and develop the use of the Bureau's statistical product and by widening the understanding of it, to improve public co-operation in the collection of the information on which statistics are based.

A study was undertaken on the work involved in converting to bilingual format those publications which are now produced in English only, in order to facilitate the conversion program. This task is being examined by the Translation Bureau and it is hoped to make some progress in this regard depending on resources available.

Further improvements were made in the design and typography of DBS publications. The first statistical series to profit from new designs was the 1966 Census publications. A series of monographs based on 1961 Census material also evidenced a fresh graphic presentation as did a number of publicity and promotional pamphlets and folders.

A new publication, the *Statistical Observer*, was introduced to serve as a medium for broadening the exchange of information on statistics and statistical research among professionals in all levels of government, in universities, in business and in other public and private organizations.

The Inquiries Section of the Division was expanded to provide improved services for an increasing number of inquiries being received by the Bureau especially from the business community. This Section during the year handled an average of approximately 900 inquiries by telephone each month and 600 by mail. In addition, there was an average of 70 visitors per month who visited the section seeking statistical information. Some of the more complex questions required a good deal of time and special tabulations. Information was assembled from a variety of sources, mostly

within, but sometimes without DBS. The majority of inquiries came from Canadian sources but a number of others were received from foreign countries. The Section also was engaged in revision and updating of the *DBS Catalogue of Publications*.

The Statistics Use Development Section began a detailed analysis of inquiries received by all Divisions of the Bureau over a 3-month period as one assessment of the nature and source of the broad demands for statistics across the country. Special studies were also done on the uses being made and the strengths and weaknesses of the *DBS Daily Bulletin*, preparatory to improvements in format and content where possible. The first regional statistics use development officer for the section was appointed during the year for Montreal. A number of seminars have been held with industry groups and associations devoted to the uses of DBS information in business and have been well received. In addition, this appointment has resulted in an increase in visits to the office of business people interested in the use of DBS information.

An advertising program designed to introduce the use of statistical information to non-users in business in all regions of Canada received a heavy response. Handling of the return coupons which were included in the advertisements put a further load on the Inquiries Section. A total of 4,600 coupons were received and each was sent an individual reply. This project resulted in a wide dissemination of statistical reports to many who had not previously availed themselves of DBS information on their particular business sector.

Publicity activities included display units for business and professional association conventions. A number of pamphlets were produced during the year for Agriculture; the Labour Force Survey; Job Vacancy Survey; the Family Expenditure Survey and Census Monographs. Several news releases were sent out during the year, and on a number of occasions,

information on DBS operation was assembled for media representatives resulting in further circulation of the Bureau's activities and services offered to the general public. Information Division personnel assisted in preparation and arrangements for a variety of speeches given by DBS staff members.

Special publicity projects were undertaken in association with subject divisions aimed at improving the rate of response to DBS questionnaires. With the same end in view, paid advertising was developed for insertion in specialized business publications.

In September 1967, in the city of London, Ontario, the first Canadian test census-by-mail was conducted and a full publicity program was developed to obtain

public co-operation. Newspapers, radio and television coverage was extensive, and results of the census test were encouraging. The campaign included direct mail pieces, participation in many radio and television presentations, posters, speeches and newspaper articles and some paid advertising.

The *DBS Daily* and *Weekly Bulletins*, which summarize the Bureau's statistical output, continued publication during the year in both French and English. Circulation of the *DBS Daily* at the year end was 1,750 and, of *Quotidien du BFS* 350. As the result of promotional work, circulation of the *Weekly Bulletin* increased from 2,700 to 4,900 for the English and from 350 to 1,100 for the French edition.

INTEGRATION AND DEVELOPMENT STAFFS

The following professional staffs are attached to the office of the Assistant Dominion Statistician for Integration and Development: Central Classifications (Research and Development); Sampling and Survey Research; Econometric Research; Regional Statistics, Research and Development; Company-Establishment Integration; Special Manpower Studies and Consultation; Consultant on Demographic Research. A review of the activities of these staffs during the fiscal year follows:

Central Classifications, Research and Development

The project to develop a Canadian Classification and Dictionary of Occupations (CCDO) in co-operation with the Department of Manpower and Immigration continued during the year. DBS staff spent some months working as occupational analysts with staff of the Manpower and Immigration Department to become familiar with all aspects of the project. This included work in the field doing job analyses, work at headquarters on occupational analysis and time spent on development of the classification structure.

A convertibility table has been prepared linking the American Dictionary of Occupational Titles, Third Edition, (DOT III), with the 1961 Census of Canada Occupational Classification Manual. The convertibility table was required by the Immigration Branch following a decision to use the DOT III in coding immigrants by occupation. Statistics of immigrants by occupation are published on the basis of the

Census occupational classification to facilitate comparisons with population figures including census data on immigrants. The CCDO project will result in a standard occupational classification which is designed as a multi-purpose system to replace the various (and often conflicting) occupational classification schemes now being used.

Various sources of occupational terms not included in the 1961 Occupational Classification Manual are now being investigated, including current statistical surveys such as the Labour Force Survey and unemployment insurance records, as well as returns to the Job Vacancy Survey, the file of collective agreements maintained by the Department of Labour and records obtained from current census tests. A sample of one thousand 1961 Census enumeration areas has been selected to permit study of the occupational terms actually reported as an aid in determining the content of the index to the 1971 Occupational Classification Manual.

Many requests have been received during the year for a final edition of the Standard Geographical Classification Manual. Preparation of the final edition of the manual has been delayed until analysis of the 1966 Census experience provided a revised list of settlements and a coding check. In the meantime, computer programs have been written to allow rapid reproduction from computer "print-outs" of the manual or any special arrangement of geographical units required for a particular purpose. The basic file of names, with codes, has been brought up-to-date and the descrip-

tions of settlements revised. A special manual was prepared for use in the London Test Census and various special lists have been provided to users for their particular needs.

In the field of commodity classification, considerable work was done during the year to develop a version of the Standard Commodity Classification suitable for coding and tabulating statistics on materials used and products shipped by Canadian manufacturers. This project is continuing in co-operation with the Manufacturing and Primary Industries Division and the External Trade Division. The special requirements of those compiling input-output tables for commodity groups reflecting the principal products of industries have also been taken into account. Many enquiries on the commodity classification have been received during the year.

Sampling and Survey Research

The prime responsibility of the staff is to work on the methodology of DBS surveys, design new surveys or redesign existing ones, and advise and participate in their implementation. The objective of such work is to achieve through the application of sampling, improved survey methods or automation, one or more of the following: increase the reliability of statistics; improve their timeliness; and/or reduce the cost of compiling them. Most of the work of the staff can, therefore, be grouped around the activities of the different subject-matter divisions.

Census Division. - Reference was made in last year's annual report to three projects undertaken to measure the coverage errors of the 1966 Population Census, and the coverage and content errors of the 1966 Agriculture Census. An initial report was produced on the errors of the Agriculture Census and will shortly be published by the Census Division. All other reports on these projects will be completed during 1968.

A large part of the staff's effort was oriented towards the planning of the methodology of the 1971 Census and several projects were undertaken in this connection.

The staff participated in the general and detailed planning of a Census Test undertaken in London, Ontario. The objective was to test a new method of data collection in urban areas which holds out the promise of important improvements in the reliability of census data without significantly changing the cost of data collection. The test was successful, but before a decision can be made as to whether these methods will be used in 1971, two other tests will be carried out in

1968. In addition, other tests will be carried out in selected rural areas to test alternative methods of data collection in non-urban areas which retain most of the advantages of the method tried out in London. The census tests are used as occasions for the development, testing and refinement of quality control methods to be applied to a large proportion of the temporary field staff of the Census.

In connection with the London Test Census, the staff had a special responsibility to design and carry out a survey to evaluate the coverage errors associated with the census data collected during the test. The results of this study which will be available in 1968 will plan an important role in assessing the new methodology used in London.

The staff was responsible for developing, in consultation with the Census Division's subject-matter statisticians, specifications for a computer program to edit and correct the raw data obtained in the London Census Test. It is hoped that the use of a program like this in connection with the 1971 Census will make a substantial contribution towards the improvement of the timeliness of census data by minimizing the need for manual correction of census records. A project was designed to evaluate the effectiveness of the automatic edit and correction program.

A study was originated to investigate the possibility of extending sampling within the Census--i.e. of collecting more of the Census questions from a sample of the population than in 1961. The extension of sampling would introduce errors into the census data, but at the same time it would reduce cost and improve timeliness. The extent of sampling depends on the balance of a number of factors: the magnitude of sampling errors in comparison with response and other errors; the extent of the possible improvement in timeliness; the extent of the likely cost-reduction; and the extent of detail required in the final tabulations. A preliminary report was written and the study is continuing in collaboration with the professional staff of the Census Division and others.

Special Surveys Division. - Methods were developed to offset the influence of uneven urban growth on the reliability of Labour Force Survey sample estimates. A system of partial revision of the sample in urban areas has been proposed and it is now in the process of being implemented by the Division.

Monthly tables are produced to show the sampling variability of over 40 Labour Force Survey estimates. A monthly set of tables and write-up is now produced jointly with the professionals of the Special Surveys Division

on the cost of the survey, on non-response rates, and on other response errors. These are evaluated monthly to ensure that the quality of statistics and the cost of their production remain in close-to-optimum balance.

Labour Division. - Preliminary investigations into the design of editing and imputation for survey returns in the Employment and Payrolls Survey--Large Firms (ES 1) have been carried out during the year in preparation for the design of a new system for the ES 1. This design was begun during 1968-69 and is scheduled for implementation early in 1969-70. The design for the new system will utilize the experience gained in the development of the Employment and Payrolls Survey--Small Firms--System (ES 2), the Current Shipments Inventories and Orders System (CS 10) and an earlier version of the ES 1. For example, while the system as a whole will be very large and complex, we have learned to break it down into modules each of which is relatively simple and can be developed, programmed and implemented separately.

Work continued on the Employment and Payrolls Survey--Small Firms (ES 2) during 1967-68 and testing and debugging has almost been completed. There is every reason to expect that the new system will be in full operation by June 1968 and that it will then be possible to drop the old system.

A small section staffed by two professional statisticians and a technical officer was set up to fulfill our responsibility for the design and development of technical aspects of the Job Vacancy Survey, scheduled for introduction as a regular semi-monthly survey early in 1969. This is an unusually complex survey of a type for which there are few, if any, precedents. Furthermore, the nature of the information it will provide and the uses which that information will serve call for very rapid processing of the survey returns. The objective of rapid processing in turn calls for flexible, efficient, generalized computer systems for file creation and maintenance, processing of a variety of survey returns, and automated preparation for distribution of a large variety of information. A survey design calling for the joint use of mail and area sampling methods has been prepared and is in the process of testing and refinement prior to large-scale implementation. Specifications for a number of computer systems have been written and are in the process of analysis, programming, or testing.

Work continued on the development of an annual Labour Costs Survey being carried out by the Labour Division. The original design was prepared in 1966-67 but has required extensive modification during 1967-68 in the

light of changing conditions particularly with respect to the source file for sampling purposes. In addition, specifications for tabulation have been prepared.

Industry Division. - Throughout 1967-68, work has proceeded on the full development of a design prepared in the previous year for the selection of a suitable sample and subsequent estimation for the Current Shipments, Inventories and Orders Survey. The staff has been testing the design in a small segment of the survey population by manually simulating the complex system to be taken over eventually by the computer. The system has been found to work well and will be introduced on a fully computerized basis during 1968-69.

Transportation and Public Utilities Division. - The staff continued to provide assistance to this Division, notably in the preparation of specifications for computer sampling from provincial vehicle registration tape files and in overcoming mailing and procedural difficulties in handling the Motor Transport Traffic Survey.

Merchandising and Services Division. - Mention was made in last year's annual report of research work oriented towards the development of a new design of the Retail Trade Survey. The present design of the survey is not based on a probability sample and there are some special difficulties in estimating the impact of new stores coming into existence and existing stores going out of business. A new design was developed in broad outlines combining most of the advantages of area and list sampling. The new design was implemented, in co-operation with the Merchandising and Services Division, on a pilot basis in Prince Edward Island. The pilot survey will be evaluated during 1968-69 and the final details of the survey design will be developed.

While work continued on the development of a new design for the Retail Trade Survey, the current version of the estimation procedure has been automated in order to improve the timeliness of the data by facilitating the preparation of preliminary estimates and in order to save some staff.

Some maintenance work was carried out in connection with the Wholesale Trade Survey developed during the previous fiscal year.

External Trade Division. - An experiment was designed (and the staff participated in its implementation) to evaluate the feasibility of having the coding clerks of the External Trade Division code on a form and in a way

which would render the coding forms readable by document readers. If this could be done, then the need for the present substantial amount of keypunching would be obviated. The experiment will be evaluated during 1968-69 by matching the results obtained through keypunching and through the document reader and analyzing the discrepancies.

A sample design was established to replace the present practice of coding and processing every import document by sampling those documents with total values of less than \$1500. The sampling, when implemented, is expected to reduce the workload of the Division considerably, thereby enabling it to further improve the timeliness of its publication and save some staff. The sampling is expected to be implemented during 1968-69.

Maintenance work was carried out in connection with the Survey of Tourist Exemptions designed during the previous year.

Special Projects. - Reference was made in last year's annual report to a new project whose objective is to use the computer to assign geographic latitude and longitude coordinates to statistical records containing a postal address as most statistical records, in particular Census records, are of this kind. Once the records are so coded, statistical tabulations can be retrieved relating to any area for which information is required by our users (subject to restrictions of statistical confidentiality). Developmental work continued on the project by a project team composed of members of the Sampling and Survey Research Staff, Census Division and Central Programming Division. A major project report was published outlining the system conceptually, stating the system design objectives and documenting the completed detailed implementation work. The system is described in 3 parts: Part 1 is the development of the street master files which will enable us to geocode urban addresses. It is anticipated that by means of this system, capability about 15 to 25 street master files for the largest urban areas will be produced, covering about 50% of the enumerated population. Part 2 is the development of the capability to recognize machine readable addresses in non-standard forms, the geocoding of addresses and the storage of census data in a form which permits fast and inexpensive tabulations subsequently. Part 3 is the development of fast, inexpensive, flexible retrieval and tabulation techniques to satisfy users' requests by arbitrarily specified areas and by any combination of census characteristics.

Part 1 of the system design and development is completed and was demonstrated by having produced a street master file and by

having plotted a street map for London, Ontario. The decoding, verification and error correction of addresses in non-standard form has been demonstrated within the framework of a limited test. Considerable effort has been expended to determine the potential users' requirements in relation to geographically referenced tabulations. The system development has been periodically reviewed and frequent dialogues have taken place with a large number of municipalities, provincial governments and universities. It is believed that the system design outlined to date meets the approval of these potential users.

The Survey Methods Staff has continued to provide technical advice to the Canadian Government Travel Bureau and to monitor surveys carried out for that Bureau by private agencies. In addition, it has participated in the development of plans for a large national travel survey tentatively scheduled for 1970, and has participated in meetings of the National Travel Research Planning Committee.

A sample survey of American motorists in Canada was carried out by private agency under contract to DBS and the Canadian Government Travel Bureau, jointly, during the period July 1 to September 21, 1967. The design for the survey and the monitoring of the implementation of that design and subsequent data processing was the responsibility of the Survey Methods Staff. The survey was completed satisfactorily and the results, the regular DBS travel data, and a comparative analysis will form the basis for recommendations for future collection of statistics in this area.

Consulting services were provided on a large number of smaller problems and projects involving most of the divisions of the Bureau as well as several other federal and provincial government departments. A paper was published in the Journal of the American Statistical Association on the new design of the Canadian Labour Force Survey. Two papers were presented to the annual meeting of the American Statistical Association on work in connection with census methods and on the geocoding project. Papers were also presented at the Oxford Symposium on Record Linkage; at the International Statistical Institute meeting in Sydney, Australia, and at the meeting of the Information Processing Association in Jerusalem, Israel.

Econometric Research

The Econometric Research Staff carries out a wide variety of research and development projects and provides a consulting service to other divisions of DBS in connection with problems involving econometric analysis or methodology.

Members of the Econometric Research Staff participated actively in the program to improve the timeliness of DBS statistics. In particular, exploratory studies were carried out in the areas of employment statistics, industrial production statistics, and the national accounts with a view to developing methods of producing advance estimates of monthly or quarterly series for earlier publication. These studies were undertaken in co-operation with members of the divisions in which the series are produced and others involved in the DBS timeliness improvement program.

As in previous years, emphasis was placed on the use of computer techniques to improve timeliness and efficiency. A consulting service was maintained to encourage and facilitate the use of general purpose computer programs throughout DBS. In co-operation with the Staff Development and Training Section, courses of instruction on the use of one widely applicable program were provided to a large number of DBS personnel during the year.

Work was carried out in co-operation with the Business Finance Division to provide estimates of capital stock in manufacturing industries for the period 1961-1967. Further work was initiated to assess the usefulness and reliability of the capital stock and related investment series for purposes of economic and econometric analysis.

Research assistance was provided to the Special Manpower Studies and Consultation Staff in connection with an intensive econometric analysis of factors influencing the participation of women in the labour force.

The Director of the Staff acted as co-ordinator of demographic and related projection work in DBS and the Staff provided consulting services to the Census Division in connection with the use of computer programs in making population projections. Consulting work was also carried out for a number of other divisions during the year.

Regional Statistics, Research and Integration

In response to demand by various federal and provincial departments and agencies, work has been proceeding on a developmental program which is to expand the supply of the most needed socio-economic data for small areas.

The purpose of one of these projects is to develop the methodology and procedures, including all-inclusive computer programs for producing a comprehensive and consistent set of annual population estimates for counties and census divisions. Experimental estimates

by alternate methods have been produced for 1961 and 1966 and compared with respective census results. Where necessary, adjustments in the methodology are being made to apply to 1967 data so that estimates of population for 1967 can be produced during 1968. The statistical work has been carried out in consultation with the Census Division and the Consultant on Demographic Research.

Work is also underway to produce annual estimates of money incomes for counties and census divisions. The aggregates produced initially will not agree with the official national accounts totals and a decision will have to be made as to whether arbitrary reconciliation should be made. The project is carried out under the direction of the Co-ordinator of Consumer Finance Research with assistance from the Regional Statistics Staff.

Research has been completed on developing measures of manufacturing employment growth for counties and census divisions using a specially prepared computer program. Two periods were compared for measuring changes in manufacturing employment: 1949-1959 and 1961-1965. A reference paper is under preparation on this project.

The staff has provided research assistance and consultation to DBS divisions and other government agencies on various boundary problems such as the revision of the Saskatchewan census division boundaries, the delineation of metropolitan areas and special administrative regions. The staff has also been involved in the work of various inter- and intra-departmental committees and working groups. The objective of these involvements was to promote and provide advice on the development of small-area statistical information by such means as utilizing administrative records for statistical purposes and extending the codeability of various record systems.

Company Establishment Integration

This staff was established near the end of 1966. One of its purposes is to examine the extent to which the annual income tax statements of business firms may be integrated with and used to replace, reduce or supplement Bureau surveys of all business and industry sectors of the Canadian economy.

A very high proportion of the basic annual data now collected in Bureau surveys of business and industry is also reported in the financial statements attached to their tax returns. However, using one to replace the other or integrating one with the other for such a massive volume of data is a highly complex and time consuming task. Nevertheless,

in spite of these difficulties, there may be possibilities of producing better data with less work on the part of the respondent and the DBS. Examining the feasibility of the use of taxation data for such purposes has been made possible by enactment of the Corporations and Labour Unions Returns Act. Under the terms of this Act, income tax returns of business and industry are available to the Bureau for extracting statistical information in the same fashion and for the same purposes as in the case of other DBS surveys conducted under the Statistics Act.

The ultimate objective of the work underway is the development of a reporting system which will ensure that respondents relate or integrate in a consistent fashion, at the reporting stage, statistics which apply to different levels of the same organization - the establishment, the company or the enterprise. In the work being done, account must be taken of the fact that financial statements filed with the tax return apply to legal entities, usually an incorporated company which may consist of an aggregation of data for a number of establishments or plants which form parts of the legal entity. On the other hand, most Bureau surveys of business and industry are at the establishment or plant level for the purpose of providing a more detailed industrial and regional breakdown of the operations of the multi-establishment multi-industry firm. Reconciliation of taxation data with DBS data for these multi-establishment firms is the most difficult part of the feasibility studies being made. For some items, the aggregates of DBS establishment reports agree reasonably well with the totals given in the company tax statement while for others, there are significant differences which can be explained only by contacting the company.

The single establishment or single plant company, where the tax return and the DBS return are for the same entity, presents fewer difficulties. The problems which arise here are more often than not those of definition: differences of concept or understanding of concept and differences in accounting terminology or practices, and economic or statistical terminology or practices. The end result is that similar items are often placed in different categories. From the work done to date, there is evidence of the need for closer collaboration between the economist concerned with the formation of concepts, the statistician concerned with collecting the data as prescribed and the accountant or member of the accounting firm supplying it. Many of the differences observed might be corrected by minor changes in accounting practices or DBS questionnaires, or by acceptance by DBS of the accounting data as currently produced.

Work done to date on which many of the previous observations are based include:- (1) an examination of American literature on work in integrating taxation data with various surveys made by the United States government agencies; (2) a series of meetings and discussions with the pertinent officers of DBS concerning the problems of this integration work, and the type and scope of feasibility studies which might be undertaken. This was followed by preparation of a document outlining the course investigations might follow and the purpose and possible benefits of the studies planned. Some of the more important studies were: (a) An examination of a cross-section of DBS establishment returns to determine if these were filled out by the accounting departments of respondents to determine if tax data and DBS data were supplied from the same source. (b) Comparisons were made, for a sample of single establishment corporations, of data supplied in various DBS surveys with similar data for the same corporations which were extracted from the profit and loss portion of the financial statements attached to their tax returns. (c) Similar comparisons to those described in (b) were made for all firms in the Paints and Varnishes Industry. This included both multi- and single-establishment corporations. A paper was prepared on the results. (d) Spot checks were made for a number of firms of the adequacy of taxation files as a source of data for respondents failing to file a DBS return or having filed an incomplete one. (e) A sample of 6,000 unincorporated tax returns in a variety of industries was examined to determine the adequacy, for DBS purposes, of the data they contained. These businesses were identified by type of business only. The name of the business or the taxpayer was not included on the transcript cards prepared for this study by the Department of National Revenue so that careful examination of the information transcribed could be made without identification of the individual being possible. Extensive tabulations of the transcript cards which contained more than 100 items have been made and a paper on the results is in the course of preparation. In the meantime, considerable use has been made of the tabular material by several DBS divisions. (f) Plans were made for the tabulation of tax data for a large sample of incorporated companies in the wholesale trade and service areas. Work is now underway on this project.

All of the above work requires the promotion and maintenance of contact with senior officials of the DBS and the Taxation Division of the Department of National Revenue. Close liaison is maintained with the Central Classification Staff concerning industrial coding procedures as they affect integration studies. A number of comparisons of coding practices in the areas under study have been made.

Special Manpower Studies and Consultation

The analytical research program of the staff proceeded with studies of selected aspects of the Canadian manpower situation. These included the following *Special Labour Force Studies*: Niveau d'instruction de la population canadienne et de la main-d'oeuvre, 1960-1965; Annual Work Patterns of the Canadian Population, 1964; The Job Content of the Canadian Economy, 1941-1961; Geographic Mobility in Canada, October 1964; Women Who Work: Part 1; The Demographic Background to Change in the Number and Composition of Female Wage-Earners in Canada, 1951 to 1960; and the following *1961 Census Monograph Studies*: Historical Estimates of the Canadian Labour Force; The Occupational Composition of the Canadian Labour Force; Provincial Variation in Labour Force Participation; Unemployment in Canada.

Additional studies under way, for which data has been specially provided, will cover topics such as the post-war immigrant labour force; social and regional aspects of education; working hours; multiple job holding; occupational mobility; child care arrangements of working mothers.

Developmental research was concentrated on the launching of a major new survey of labour demand--the Job Vacancy Survey--undertaken on contract for the Department of Manpower and Immigration. This survey has re-

quired an intensive and continuing program of conceptual and analytical research because of its complexity, size and essentially experimental nature. It has occasioned widespread interest in the United States and abroad.

Problems of a conceptual and analytical nature in respect of the 1971 Census test program were also of major concern in the developmental research activity of the staff.

Consultant on Demographic Research

The 1961 Census monograph on urban development in Canada was published and a draft of the 1961 Census monograph on internal migration in Canada was completed. A draft of the 1961 Census general review bulletin on migration in Canada was completed.

A special 1961 Census tabular bulletin on migration and marital status was completed and published. The drafts of two additional special census tabular bulletins--one on migration of the labour force and one on migration to metropolitan areas--were completed.

Data and advice on urban development were provided to the Economic Council of Canada for a chapter in the Fourth Annual Review of this Council. In addition, the Consultant served on four committees engaged in the planning of the Census Tests.

ECONOMIC ACCOUNTS BRANCH

The Economic Accounts Branch is responsible for the assembly and analysis of statistics within an overall national accounting framework, through its Balance of Payments and Financial Flows Division and the National Accounts, Production and Productivity Division, the Current Business Indicators Section and the establishment and maintenance of data banks of economic time series.

Balance of Payments and Financial Flows Division

The Balance of Payments and Financial Flows Division is concerned with the construction, analysis and publication of statistics and reports related to two important sets of economic and financial relationships. The first of these involves estimates of the balance of payments covering economic and financial transactions between Canada and other countries and estimates of Canada's interna-

tional investment position, measuring and exploring the country's external assets and liabilities. The second set of relationships is embodied in a comprehensive set of financial accounts, setting out intersectoral claims and revealing the process by which real and financial resources are transferred within the Canadian economy.

The current publication program of the Division includes quarterly and annual reports on the balance of payments with annual detail on Canada's international investment position, monthly reports on sales and purchases of securities between Canada and other countries, and monthly and annual reports covering travel between Canada, the United States and other countries. During the fiscal year, two major publications were issued: *The Canadian Balance of International Payments, A Compendium of Statistics from 1946 to 1965* revised and extended earlier data and presented them in

convenient and accessible form, and *The Canadian Balance of International Payments, 1963, 1964 and 1965*, and *International Investment Position* which brought forward the series published in earlier annual volumes and contained some extended detail including a special analysis of the principal statistics of manufacturing establishments of foreign-controlled enterprises in Canada.

Unsettled conditions in the international exchange and money markets, and balance of payments difficulties in some of the principal countries of the world, were characteristic of much of the year. Under these circumstances, balance of payments statistics continued to attract close attention from the public and from officials, and considerable time was spent in providing guidance to, and elucidation of, available data. Figures for the full calendar year were published early in March. A considerable amount of work was also done for the Watkins' Task Force on the Structure of Canadian Industry. Developmental work has been carried out to provide more extended statistics of Canada's direct investments abroad. Staff of the Division participated in meetings of the Committee of senior officials on the Canada-United States balance of payments, and by invitation, in a meeting of balance of payments statisticians convened by the International Monetary Fund. Staff visits were made to the Central Statistical Office of the United Kingdom and to the Office of Business Economics of the United States Department of Commerce with whom close and cordial relationships exist.

The International Travel Section implemented the new methods necessitated by administrative changes described in last year's report, and coped with the measurement of unprecedented levels of tourism associated with Expo 67 and other centennial activities in Canada. An "automobile exit" survey of United States travellers, carried out in the summer months by a private firm under a contract to which DBS was a party, yielded expenditure estimates generally consistent with those obtained under the continuing methods employed in the section.

Developmental work in the Financial Flows Section proceeded during the year, but due to staff vacancies did not reach publication stage. The importance of this project has been underscored by the severe pressures experienced during the year in the capital market, and in the consideration of other policy matters such as tax structure. Arrangements were made for Canadian participation in two meetings of the *ad hoc* group of financial statisticians established by the Organization for Economic Co-operation and Development.

National Accounts, Production and Productivity Division

The National Accounts, Production and Productivity Division co-ordinates, processes and analyses information from a variety of sources. This encompasses responsibility for the national accounts income and expenditure flows, the work on gross domestic product by industry in both current and constant prices, (the latter including the index of industrial production), and the development of measures relating to the aggregate productivity performance of the Canadian economy and its major sectors. The division is also responsible for the production of the *Canadian Statistical Review* and the concomitant production of monthly articles for this publication as well as further development and research of seasonally adjusted data.

Regular publications of the division include the following: *National Accounts, Income and Expenditure Statements*, quarterly and annual reports; the monthly publication of the *Indexes of Industrial Production* and the *Quarterly Indexes of Non-Agricultural Real Domestic Product* as well as the annual publication of the *Survey of Production* which deals with the output of commodity producing industries on a provincial basis. In the area of productivity, indexes of output per person employed and per man-hour are published annually for the commercial economy and its major components. The available detail now includes separate measures for the commercial goods- and service-producing industries as a whole. At the individual industry level, substantial progress was made on the preparation of a special report on iron and steel mills.

In addition to the provision of day-to-day assistance to many business, academic and government users, considerable material was furnished to such government agencies as the Departments of Finance, Trade and Commerce, the Economic Council of Canada, and the Bank of Canada for the preparation of their reports and for their needs in fulfilling their obligations as economic advisers to the government.

Of special interest during the past fiscal year has been the gain in timeliness in the *Index of Industrial Production* which is now published six weeks after its reference month in contrast to the previous time lag of ten weeks. The work to rebase the industry of origin Real Domestic Product system (including the index of industrial production) to a 1961 weight base and to incorporate revisions to the Standard Industrial Classification into these indexes is now reaching completion.

In collaboration with the Economic Council of Canada, further development work

on the improvement of a time series data bank was carried on during the past fiscal year. The existing data bank was used intensively by other federal government departments and agencies and it is hoped to make a more sophisticated use of such a data bank available to the public in the coming fiscal year.

The Division participated in the international deliberations and conferences which are taking place in connection with the proposed revision of the United Nations International System of Standard National Accounts. In this connection, members of the staff attended conferences of working groups on National Accounts and Balances of the Conference of European Statisticians in Geneva as

well as a symposium on these topics held in Warsaw, Poland, and constituted part of the Canadian delegation to the United Nations Statistical Commission.

Two members of the staff prepared a joint paper on *The Measurement of Constant Price Aggregates in Canada* for the International Association for Research in Income and Wealth at Maynooth, Ireland. Another paper entitled *The Service Industries in Canada, 1946-66* was given by a staff member at the Conference on Research in Income and Wealth held in Ottawa, while another member of the staff contributed a paper to a seminar on Government Information Systems organized by the Economic Council of Canada.

FINANCIAL STATISTICS BRANCH

The Financial Statistics Branch, which was formed on January 1, 1967 as part of the reorganization of the Dominion Bureau of Statistics, consists of the Director General of the Branch, the Co-ordinator of Financial Statistics staff, the Business Finance Division, the Corporations and Labour Unions Returns Act Division, the Central Personnel Records System and the Governments Division.

The Financial Statistics Branch was formed in order to increase and improve the comparability, timeliness, and comprehensiveness of financial statistics. This action was particularly motivated by the formation in recent years of the Corporations and Labour Unions Returns Act Division which greatly expanded the amount of financial data available to DBS.

A number of important financial series are located elsewhere--in the Balance of Payments and Financial Flows Division of the Economic Accounts Branch and in the Co-ordinator Consumer Finance Research Staff of the Socio-Economic Statistics Branch. On the other hand, the Financial Statistics Branch is responsible for the production of a number of important non-financial statistical series in the Business Finance Division and the Central Personnel Record System.

Financial Statistics

The Co-ordinator of Financial Statistics includes in his responsibilities advising on the development of new financial statistics and the integration of new and existing series. The objective is to meet the demands of the

users of financial statistics as efficiently and completely as possible.

The responsibility for the development of financial accounts now rests officially with the Balance of Payments and Financial Flows Division. In the absence of a chief of the Financial Flows Section, the Co-ordinator of Financial Statistics has continued in charge of this work. Publication of quarterly financial accounts will begin in 1968.

During the past year, the Co-ordinator Staff has assisted the Governments Division in the development of government series related to the National Accounts and the financial flows.

Business Finance Division

The Business Finance Division is responsible for the development, collection, compilation, analysis and publication of data on a variety of subjects, such as profits, assets and liabilities, capital expenditure intentions and realizations, construction activity, statistics of the construction industry, housing, building permits, scientific research and development, commercial failures and bank debits. The Division is also responsible for the development of estimates of financial flows for the corporate sector of the economy, as well as estimates of flows and stocks of capital goods in the economy.

In recent years the Financial Statements Section has been concerned with quarterly financial data taken from balance sheets and

operating statements of all the financial and non-financial corporations. It became evident that the financial sector, because of its importance, complexity and ramifications, required special attention in survey approach. During 1967, a new Section--the Financial Institutions Section--was formed to deal specifically with the task of developing surveys of all financial institutions. The Section continued the collection of quarterly balance sheet data of trust companies, mortgage loan companies, sales finance and consumer loan companies and fire and casualty insurance companies, investment dealers, and mutual and closed-end investment funds. During the year estimates of credit unions were developed jointly with various provincial government officials and members of the credit union movement. Additional work is planned on life insurance companies, chartered banks, holding and management companies, business finance companies and real estate development companies. As the surveys are implemented, the results will be incorporated in the regular quarterly publication *Business Financial Statistics*. In the long run, the objective is to offer quarterly data for all the categories of financial institutions on balance sheets, revenue and expense statements, retained earnings statements, and sources and uses of funds statements.

The Financial Statements Section which, as a result of the organizational change, is concerned with non-financial corporations, continued its surveys of quarterly corporate profits of the non-financial sector. The results of this survey are published in detail in the quarterly report *Corporation Profits*. The Section also continued its work in the development of quarterly balance sheets, income and expense statements, and sources and uses of funds for each major industry group for each quarter since 1962. The availability of more recent annual data from the Corporations and Labour Unions Returns Act Division will enable the Section to up-date the benchmark data of 1962 which has been used as a base for projecting the quarterly data from the sample survey. Where necessary, corrections will be made to the historical series going back to 1962. The publication of such a series is expected to be late in 1968, even though they may be considered as experimental owing to the number of technical problems still to be solved in this difficult area.

Most of the development work of recent years in the above two Sections of the Division has been related to the production of financial flows in the corporate sector of the economy. Considerable work was carried out in both Sections during 1967 to derive quarterly estimates of such flows to be included in the forthcoming DBS publication on the national

system of financial accounts which cover all sectors of the economy.

In the Capital Expenditure Section, existing annual surveys are being continued to provide national, regional and industry estimates of intentions for the year ahead and realizations for the past year on capital and repair expenditures, on new construction, and on new machinery and equipment. The need for more current data on investment as an economic indicator has been expressed strongly in the recent past by policy-makers as well as the business community itself. As a result, during 1967, a new unit was established in the Capital Expenditure Section to undertake the development of a quarterly survey of investment intentions and realizations. This development work was well advanced by the end of the year and implementation of the survey is expected to take place in the second quarter of 1968. Plans are to use a representative sample of firms sufficient to yield good estimates for the business sector of the economy. It is not intended, at least for the time being, to conduct a survey large enough to provide industry and regional detail.

Over the many preceding years, the size of the capital expenditure surveys permitted the estimation of investment intentions by industry, by province, and the results were published in *Private and Public Investment in Canada, Outlook* at the beginning of each year. However, the results of the mid-year survey of revised intentions were available for each industry group as national totals only, owing to the fact that the latter relied on a sample of the respondents included in the original intentions survey. In June of 1967 all respondents in the original survey were requested to revise their earlier estimates and for the first time it was possible to publish revised estimates of intended capital outlays by industry and by province. In 1968, it is expected that the provincial series will be published in *Private and Public Investment in Canada, Mid-Year Review* at the same time as the national totals. In 1967, it was necessary to release provincial totals much later than national totals owing to the sudden increase in the workload.

Early in 1967 a special experimental survey was developed to produce a limited range of selected qualitative company information as a follow-up to the investment intention survey. The emphasis was placed on capacity utilization, sales outlook, financial considerations and other economic factors affecting investment, in order to provide some guidance in the evaluation of the 1967 program of capital expenditures. After considerable effort to improve the questionnaire in the light of this first experience, the survey is

being repeated early in 1968. This qualitative approach is new in Canada and, at this point, considerable research in methodology needs to be done before deciding whether this kind of survey will be a permanent feature in the range of surveys on investment.

It has been recognized for a long time that estimates of capital formation in the mining industry (excluding oil and gas mining) needed substantial improvement. While the capital expenditure surveys were being used as a vehicle to obtain estimates of related mining expenditures as well, such as exploration, it was found extremely difficult for the respondents to try to separate what is considered capital formation from non-capital outlays because of insufficient clarification of the conceptual approach which led in turn to inadequate questionnaires. Consequently, national totals, not to mention provincial detail, were not very reliable. In 1967, with the excellent co-operation of representatives of the industry, provincial government officials and other federal government officials, it was possible for the Business Finance Division and the Manufacturing and Primary Industries Division of DBS to design a new questionnaire and new survey procedures for this important industry. The new questionnaire which is the product of many consultations with all the above groups is quite elaborate but is believed to be very practical by respondents in the industry. Moreover, the new procedure meets the requirements of DBS, the Federal and Provincial Departments of Mines and other prime users, thus eliminating most of the existing duplication. At the same time, the new survey, which was implemented in January of 1968 for the year of 1967, covers non-producers which, except in Quebec, were never before reached by a survey. Joint collection agreements have also been reached with Nova Scotia, Quebec and British Columbia. The survey covers exploration, development, capital and repair expenditures and other selected activities.

Other work during the year included the continuing program of improvement of existing surveys, such as further refinement of the oil pipeline questionnaire, initial work in the development of a new approach for the electric power industry and the selection of a new sample for the wholesale trade.

Late in 1967, a project was started using statistical information already existing in Business Finance Division and in the Corporations and Labour Unions Returns Act Division. This project is an attempt to measure capital spending by foreign-owned firms in Canada as compared with firms controlled by Canadian residents. From preliminary results already made available through this project, it is possible to distinguish certain trends in the

pattern of spending. On the other hand, considerable work remains to be done to estimate the magnitude of the spending of foreign-owned firms as compared with the total capital expenditures in Canada.

In addition to the construction data provided in the investment reports which show expenditures on construction, both new and repair, as reported by organizations paying for the work done, another report published in June of each year and entitled *Construction in Canada* provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. This report, issued by the Construction Section of the Business Finance Division, also provides separate estimates for the value of work performed by construction contractors and that performed by others engaged in construction work on their own account, as well as an estimate of the equivalent man-years necessary to carry out the annual program of construction. Information on types of structure is derived from the capital expenditure surveys mentioned earlier, which obtain information on the labour and material content of own-account construction. The labour and material content of the construction contractors is derived from the results of a sample survey of construction firms conducted annually by the Construction Section. The sample is too small to provide detailed statistics on the construction industry other than grand totals for labour and materials.

During 1967, the Construction Section undertook a study aimed at determining the feasibility of a census of the construction industry. Such a survey is necessary owing to the paucity of data on the organization of the construction industry and its operational characteristics. In addition to this reason a complete set of basic industrial statistics in a detailed form is required in order to begin measuring its real output and productivity in a more adequate fashion. As part of this developmental program, considerable time was spent on negotiations and studies with representatives of a major sub-industry group of contractors with the purpose of undertaking a census of that particular group. Implementation of this census is planned for August 1968 and will constitute the pilot study to determine the feasibility of undertaking on a gradual basis full coverage of the construction industry.

The Housing and Building Permits Section publishes a monthly report on building permits, which provides data on the number and value of housing units by type and value of industrial, commercial, institutional and government building construction in more than 1,400 municipalities in Canada. The Section also issues

a monthly report *New Residential Construction* containing the results of a nation-wide survey conducted by the Central Mortgage and Housing Corporation, providing data on dwellings started, under construction and completed. These physical measures of housing are translated into value for the purpose of estimating quarterly and annual residential capital formation. In addition to producing current housing and building permit statistics, the Section has, during 1967, made substantial progress in a very involved developmental project aimed at designing a method of measuring quarterly housing investment taking into account seasonal variations, regional differences and changes in housing characteristics to replace the existing global method which is far from adequate, particularly in times of change in housing activities. The new method will be ready for implementation later in 1968 and relies to a large extent on the systematic use of certain administrative records made available to DBS by the Central Mortgage and Housing Corporation.

In 1967, the Division completed a project designed for the purpose of reconciling the data on the stock of dwelling units as measured by the decennial Census of 1951 and 1961 with the intercensal activities in housing as measured by the starts and completions surveys. This project was undertaken because there appeared to be a substantial discrepancy between the net intercensal change in the housing stock as measured by the Census and the measures of intercensal activities. It was necessary to isolate, measure or estimate the diverse "gross" activities (completions, demolitions, conversions, mergers, change in uses and change in vacancy status) which created the net change in the number of dwellings as calculated by subtracting the 1951 from the 1961 stocks of dwellings. In the absence of data on these activities (except for completions) various assumptions had to be made and a number of estimates had to be made as well. Changes in population, household formation and persons per household ratios were used as checking devices. In addition, it was necessary to re-introduce comparability between the 1951 and 1961 Census definitions and methods of aggregating. The reconciliation project revealed that the intercensal activities had been understated and the results are going to be incorporated in a revised series of housing investment for the period 1951 to 1967.

The Scientific Activities Surveys Section has two regular surveys on scientific research and development: one on the Federal Government's activities and one on the Canadian industry. In 1967 the survey of the Federal Government was converted to an annual survey. The industry survey will continue to be biennial for the time being. *Industrial Research*

and *Development Expenditures in Canada, 1965* was released during 1967 and presents, among other information, estimates of outlays on current research and development, sources of funds, field of research, type of research and scientific manpower utilized. Preliminary results from the 1965-66 survey of Federal Government expenditures on scientific activities were also released during the year. The Section has been heavily involved with other agencies interested in the field of scientific activities, particularly the Science Secretariat and the Department of Industry, in the design of specialized surveys and in the preparation of special reports and compilations.

Since 1963 the Division has worked with the Directorate for Scientific Affairs of the Organization for Economic Co-operation and Development in its efforts to standardize research and development concepts and practice for facilitating international comparisons and to promote further refinements in measurement of research and development and its implications. This co-operation was particularly close during the last fiscal year when the Chief of the Scientific Activities Section was attached to the OECD headquarters in Paris for two months at the request of the latter organization.

The National Wealth and Fixed Capital Stock Section released two major publications early in 1967. The first, *Fixed Capital Flows and Stocks, Canada 1926-1960 - Methodology*, contains a review of the concepts, sources and methods used in the preparation of the statistical material on flows and stocks of capital goods in manufacturing industries. The second, *Fixed Capital Flows and Stocks, Manufacturing, Canada 1926-1960 - Statistical Supplement*, is a complete tabular presentation of the statistical material. Since then, the Section has prepared further estimates for the years 1961-1966. These estimates are based on the 1948 Standard Industrial Classification since as yet the difficulties associated with developing estimates based on the 1960 revised SIC have not been overcome. Work also progressed on the development of estimates for sectors other than Manufacturing and, as a result, it is expected that preliminary estimates for a number of sectors will be completed during 1968.

The Division has continued to publish quarterly reports on commercial failures in Canada. These reports are based on material supplied to the Bureau under the provisions of the Bankruptcy and Winding-Up Acts. The number of failures and the amount of liabilities involved at the time of bankruptcy are published by region and by industry. Reports have also been issued monthly and annually on the total value of cheques cashed in fifty-one

clearing centres in Canada from material supplied by the Canadian bankers' Association.

Central Personnel Record System

The Central Personnel Record System was established by Treasury Board Minute 654427 dated April 12, 1966. The decision to form this division was primarily based on a recommendation of the Glassco Commission "that personnel statistics for the Public Service be centrally tabulated by the Dominion Bureau of Statistics for use of the Treasury Board, the Civil Service Commission and departments".

The basic purpose of the system is to provide the central agencies--in particular, the Treasury Board, the Public Service Staff Relations Board and the Public Service Commission--with data on the manpower of the Federal Public Service to assist in determining policy on manpower management. The System is also used to produce statistical information for the publication *Federal Government Employment* prepared by the Governments Division.

During the year the initial file was established through the merging of previously existing record systems maintained at the Public Service Commission and DBS. Validation of the file content with departmental records has commenced and will continue until all records have been confirmed. The planning of file extensions to include employees not previously covered and to acquire additional information not previously recorded is well under way.

Data for use of the Treasury Board and other management agencies of the Federal Government are commencing to flow out of the system. A Survey of Benefit Usage for collective bargaining purposes was produced for Treasury Board and covered the scientific and professional, administrative and foreign service, technical and administrative support categories for the fiscal year 1966-67.

CPRS and the Department of National Health and Welfare have undertaken a co-operative project to develop departmentally oriented reports from the CPRS system. The project is now well advanced with departmental personnel having validated and extended the records to cover additional employees, positions and data elements not previously recorded. CPRS has almost completed a series of programs to produce tables and listings of value to the department. These are tables of general value which will be produced for other departments with little or no modification in most cases.

The establishment of the CPRS brought to a head the problem of personnel action

forms in the federal government sphere. The essential elements were:- (1) too many forms, in many cases with duplicating or overlapping functions; (2) lack of standardization in size, sequence and style; and (3) unsuitability for data processing purposes. To overcome these problems and generally improve the paper-flow systems associated with personnel activities, the Treasury Board authorized a Personnel Forms Study which has progressed to the stage where it is anticipated that new forms will be in service during 1968-69.

Corporations and Labour Unions Returns Act Division

The Corporations and Labour Unions Returns Act Division is responsible for annual corporation financial statistics for the Canadian economy including operating statistics, balance sheet data, profits and income taxation; for statistics relating to the ownership of a group of larger corporations; and in addition, for annual information on labour unions in Canada. The passage of the Corporations and Labour Unions Returns Act in 1962 required the establishment of a new program within the Dominion Bureau of Statistics to examine the extent and effect of non-resident ownership of larger corporations in Canada and the extent and effect of the association of organized labour in Canada with international unions. The magnitudes of these international associations have been established in broad terms in the annual reports published under the Act. At the present time work is continuing to further refine these magnitudes and to make the data as useful as possible.

In 1965 amendments to the Corporations and Labour Unions Returns Act permitted the extension of the analysis of corporation financial activity to all corporations in Canada. The program developed and implemented for corporation fiscal years ending in 1965 was an extension of the corporation financial statistics program carried out by the Department of National Revenue for some years and published in *Taxation Statistics*. The new program introduced a number of amendments to the statistical series which should prove useful to users of these statistics.

In 1967, the publication *Foreign-owned Subsidiaries in Canada*, a joint project of the Department of Trade and Commerce and the Dominion Bureau of Statistics, was released. This publication was based on a special survey of the larger foreign-owned subsidiaries in Canada and contained unique information on the financing and operations of these companies. During the year some additional work was performed to complete the statistical basis for the Watkins' report to the Cabinet Task Force on Foreign Ownership.

It is expected that the corporations section of the *Taxation Statistics* publication, for which the Department of National Revenue was formerly responsible, will be published early in the 1968-69 fiscal year covering data for corporation fiscal periods ending in 1965.

Governments Division

Effective January 1, 1967, the former Governments Section of the Governments and Transportation Division was established as the Governments Division. During the year 1967-68, considerable time was spent by senior personnel of the Division in assessing and defining the role of the Division and the scope of its financial statistics program, and in developing a plan of organization indispensable to the more efficient administration of the Division under which the rapidly growing interest in and demands for government financial statistics might be met.

As an integral part of the latter, explanatory material on the Division's program was prepared and will be incorporated in the near future into a brochure for distribution to government finance officers. It is hoped that through this medium officials will become better acquainted with the range of statistics now available and thus be in a better position to plan and conduct analyses of particular interest to them.

Throughout the year, the Division continued to provide consultative services through representation on various committees. Members of the Division served with the secretariat of the Tax Structure Committee and advised on the quality and timeliness of the analysis of revenue of Provincial Governments and on the suitability of available data for inclusion in the new formula for Federal-Provincial equalization payments. The Division also assisted in drafting the technical wording of the Federal-Provincial Fiscal Arrangements Regulations, 1967, which require the use of DBS statistics in the calculation of equalization payments.

The Division was represented on the continuing committee of the Interdepartmental Committee on Expenditure Coding established under the auspices of the Comptroller of the Treasury to develop a coding system for the economic analysis of federal government expenditure, commencing April 1, 1968. The Division has undertaken to define in the required detail the economic objects of expenditure which conform closely to the classification used in the National Accounts framework; to examine annually the economic object-line object relations established by

departments and agencies and to make recommendations on the compatibility thereof.

In addition, the Division was consulted by the Province of Ontario on the development, for its own use, of a coding system similar to that presently being implemented by the federal government for economic analysis purposes. It is hoped that this growing interest in a systematized classification of expenditures will permit the development by this Division, of a model matrix-classification system of Government expenditure which would provide financial statistics on both the functions of government and the objects of expenditure--i.e. the cost to government of the services it provides and the objects on which it makes expenditures in the provision of such services.

During the year the Division provided suggestions on the feasibility of a study of the revenue capacities of the Yukon Territory which is being conducted by other departments of the Federal Government. It also assisted the Canadian Council on Urban and Regional Research in its survey of federal, provincial and selected local governments to determine their expenditures on urban-regional research.

The Division represented DBS at the Eighth Federal-Provincial Conference on Municipal Finance Statistics and also provided the secretariat for the Conference. The Eighth Conference differs significantly from its predecessors in origin, form and program. The need for this Conference was clearly indicated at an earlier conference of users of municipal finance statistics, jointly sponsored by the Canadian Tax Foundation, the Canadian Council on Urban and Regional Research, the Institute of Local Government of Queen's University and DBS, which was held at Queen's University in June 1966.

The Eighth Conference was convened by DBS and was the first of these conferences to meet outside Ottawa and to have an agenda planned for discussion in stages over a period of years. The First Session, which was held at Victoria in April 1967, recommended that DBS review the form and content of the basic statements recommended for municipal use in the *Municipal Finance Reporting Manual* (3rd Edition, 1960) and make recommendations for their revision to the Conference. DBS is also to make recommendations on the desirability of incorporating a classification system to permit economic analysis in a revised edition of the *Manual*. The first recommendations on classification of accounts are now being circulated to the participants at the Conference. The Second Session, which will consider the recommendations, will convene in late May or early June 1968.

ECONOMIC STATISTICS BRANCH

This Branch covers the operations of six divisions and an "Input-Output" research and development staff. Branch activities are principally concerned with the collection, processing, analysis and publication of statistics derived from business establishments. These consist, in general, of production, sales and service "units" in contrast to the reporting universe of the Financial Statistics Branch which, so far as the private sector is concerned, deals with companies.

For the most part the collection of the information is carried out by means of hundreds of monthly, quarterly and annual "mail type" surveys of varying sizes although a number of "enumeration type" surveys are also involved. The Branch tends to concentrate on production or sales of commodities and services, materials used, employment, prices and imports and exports of commodities.

As a result of the general ceiling imposed on the DBS establishment during the past year the Branch was called upon to give up a number of positions and re-allocate others in order to meet the most urgent Bureau and Branch priorities, principally the programs of the Operations and Systems Development Branch and those of the Prices and External Trade Divisions. The consequence was a certain curtailment and stretching out of statistical programs and services in the areas of transportation, merchandising, manufacturing and labour research. The establishments of the divisions concerned were reduced by a total of 37 positions. Despite these constraints, however, heavy emphasis was placed on achieving the objectives of the 1967-68 timeliness program. During the year, the Branch worked very closely with the Bureau's Timeliness Committee in mounting a determined drive to improve the efficiency and timeliness of major monthly series produced by the Branch. These consisted of the monthly surveys of Employment and Payrolls; Manufacturing Inventories, Shipments and Orders; Retail Sales; Imports and Exports; and the large number of individual commodity surveys in the manufacturing, mining, forestry, fishing and energy fields. This program has had a solid success and has resulted in substantial overall gains in timeliness. Some of the details are outlined below in the divisional reports. It should also be noted that the earlier availability of the monthly commodity data has made it possible to release the monthly *Index of Industrial Production* more than three weeks earlier than was the case a year ago.

External Trade Division

The External Trade Division is responsible for the production of Canada's export and import commodity trade statistics. The monthly, quarterly and annual publications of the Division provide data on trade by country and commodity, by province of customs clearance and by stage of fabrication; on exports by mode of transport, by province of lading, and on imports by tariff item.

A complete reorganization of the work and personnel of the Division was undertaken during the year. The operations program was restructured to produce more effective processing of the import and export customs documents, which in total are now arriving at a rate of almost one million per month. Separate sections were set up for import and export operations. Within each section the commodity classification clerks were divided into document processing teams, specializing in broadly homogeneous groups of commodities. This procedure has enabled those involved to develop a greater degree of specialization concerning their sector of the commodity classification, leading to significant improvements in the quality and timeliness of the trade reports. The gains in timeliness have been particularly noteworthy in the release of import information, amounting by the end of the year to approximately six weeks.

There have been a number of other developments in the operations program. The timeliness of export information has been improved by transferring the production of data to the Bureau's computer installation from the slower unit record machinery. At the end of the year, prospects were good for further progress in this respect. Improvements in the clerical recruitment situation made a further contribution to timeliness. Another development in the operations area has involved the testing of a document reader. If these tests prove successful, the opportunity will arise to bypass the key-punch aspect of our processing procedure, thereby resulting in an additional gain in timeliness of two days per month.

The continuing task of revising the Export and Import Commodity Classifications was pursued during the year. A number of improvements were made and are shown in the 1968 editions of the Classifications. Substantial assistance was provided by a number of commodity specialists who were engaged during the year. The expectation is that there will be many further far-reaching developments in this area during the coming year.

The work of the Division continued without the benefit of adequate professional resources, although some improvement was noted in the staffing picture. A great deal of time and effort was devoted to setting up and testing a sampling procedure for processing entries pertaining to imports from the United States. This project is still in progress and it is expected that, should the testing prove successful, important gains should be achieved in timeliness and cost reduction. The acquisition of additional professional staff during the year enabled the Division to undertake a number of trade studies, and determined efforts were made to eliminate the serious backlog in the Division's annual publications, particularly in the analytical field. We confidently expect these efforts to bear fruit during the coming year.

Much attention has been devoted to means whereby the physical preparation of the current reports may be hastened and their appearance improved. Studies have been undertaken to assess the possibilities of increased computerization in this area and to bring about a reduction of clerical involvement. The results of this work should also be seen soon. In sum, the Division as a whole has been mounting a concerted attack from all sides on the problem of producing more quickly than heretofore the publications which are its responsibility. Progress has been made, as will already be apparent to users, and 1968-69 should see considerable further improvement.

Input-Output Research and Development

The Input-Output Research and Development Staff is engaged in the compilation and updating of national and selected regional input-output tables which depict flows of goods and services through the economy. It undertakes research into input-output concepts and methodology and provides technical advice and statistical assistance to producers and users of such tables. Within the framework of the DBS statistical system, the Input-Output Staff is engaged in reconciling diverse estimates and formulating methods for improving the general integration of the statistics required by a detailed social accounting system.

Work on the preliminary version of the 1961 Input-Output Table was reaching its final stages by the end of the fiscal year. The studies associated with this project have provided a new and consistent set of data on the production and disposition of 640 classes of goods and services. The disposition comprises 179 industrial sectors as well as several categories of final demand. These commodity balance studies provide, within a scheme that is consistent with the implementation of a broad DBS social accounting frame-

work, information on the available supply and use of all goods and services. Work on these studies has uncovered areas in which DBS data need further improvement. Work was commenced on a detailed study of the goods and services purchased by all levels of governments. This project, which has involved considerable work this year, is to be completed in the coming year and will provide data which is currently unavailable for input-output and general analytical purposes.

During the fiscal year the Input-Output Staff produced the preliminary detailed estimates of "value added" and its components for each industry in the business sector. This work is providing the basis for a revised industrial distribution of Gross Domestic Product for the base year 1961 and is a major component of the industrial weights assigned in the Index of Industrial Production. A study of the components of "value added" has been useful in revising earlier estimates and has led to an overall improvement in the aggregate.

The Input-Output Staff provided technical advice and assistance to various government departments and agencies at both the federal and provincial level. Discussions have taken place with the Economic Council of Canada, the Atlantic Development Board and the Department of Industry on the broad concepts and uses of input-output analysis as well as specific components of input-output tables. The Staff is, in addition, currently working on an up-dating to 1965 of the Input-Output Tables for the four Atlantic Provinces under a contract with the Atlantic Development Board which also involves various analytical tabulations.

Detailed tabulations of trade and transportation patterns necessary for the construction of input-output tables were also made available to provincial governments engaged in this work.

Labour Division

The Labour Division is concerned with production of a broad and varied program of establishment surveys and administrative statistics. The subject matter covered includes statistics of labour input and labour cost, occupational job vacancies, pension plans, and data relating to the operation of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration. During 1967-68, a number of changes took place in the organization and functions of the Division. The Job Vacancy Survey Section, established in early 1967, was staffed to operational levels and a mail survey of large establishments in the

manufacturing industry initiated in September. A new unit was established in the Employment Section to initiate a survey of employer labour costs in January 1968. The Unemployment Insurance, Manpower and Pensions Section was separated into two sections: (1) Unemployment Insurance and Manpower; and (2) Pensions.

The Employment Section is responsible for the preparation of employment indexes, statistics of hours and earnings and labour income. Employment aggregates by industry and province are also published on a regular basis. In 1968, the functions of the Section were expanded to include periodic surveys of employer labour costs. During the reference period, a major preoccupation of this Section was the investigation of the application of computers to improve timeliness in the production of employment, hours and earnings data from monthly surveys. Early in the year, automated mailing and follow-up procedures were introduced using computer printouts in conjunction with automated mailing equipment. The use of photocopy was also introduced about the same time to largely eliminate typing of statistical tables. These changes resulted in an appreciable improvement in efficiency and timeliness.

Additional major improvements in timeliness were realized as a result of the introduction of early cutoffs and improved manual imputation procedures. Thus, by the end of the year, release time for the preliminary monthly employment, hours, and earnings data was reduced by some four weeks. Mechanized editing and imputation procedures now in course of preparation will improve timeliness still further next year.

Coverage of employment aggregates by industry and province were expanded by the inclusion in February 1968 of data for federal and provincial government, educational institutions, and hospitals. These data have been collected for some time but were not published until their statistical validity could be checked. With the addition of the new estimates, the aggregates will provide data for all of the commercial non-agricultural labour force and a large part of the non-commercial sector.

Following analysis of the results of a pilot survey conducted last year, a full-scale survey of employer labour costs in the manufacturing industry was initiated in January 1968. This involved extensive planning and consultation with a number of large firms and with the Canadian Labour Congress. To avoid duplication of effort, the survey was undertaken in co-operation with the Department of Labour, Economics and Research Branch, and the Pay Research Bureau.

The Unemployment Insurance and Manpower Section is responsible for compiling statistics reflecting operations of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration. Unemployment insurance was expanded to cover agriculture on April 1, 1967. This involved extension of the statistical program to provide information regarding the number and characteristics of covered persons in agriculture and arrangements for producing statistics regarding claims from this industry. In connection with proposed revision of the Unemployment Insurance Act, Bill C-197 to become effective July 1, 1968, a number of investigations were carried out for the Unemployment Insurance Commission by the Section.

During 1967, a series of discussions took place with the Department of Manpower and Immigration regarding revision of basic statistical reporting documents and related procedures concerning the operations of the Canada Manpower Service. It is expected that as a result of the stabilization of statistical reporting procedures and documents it will be possible to proceed with plans for introducing a monthly publication to provide the interested public with official statistics regarding the operations of the Canada Manpower Service.

The Pensions Section is responsible for the collection and publication of information from an annual survey of trustee pension plans. The Section also undertakes periodic surveys of all pension plans in Canada, and special investigations to meet needs of the pensions industry. During 1967 the results of a survey of all pension plans taken in January 1966 were released. This survey provides a variety of information concerning number and type of plans, number of persons covered and, for the first time, number and characteristics of persons retiring on pension and earnings of such persons before retirement in relation to pension income. Early in 1968 a project proposal was approved providing for the initiation of a small new quarterly survey of large trustee pension plans to provide current information concerning financial flows generated by these plans.

The new Job Vacancy Survey Section is responsible for a monthly survey of occupational job vacancies carried out under contract for the Department of Manpower and Immigration. The primary objective of the program is to develop information which will be used in determining selective policies regarding immigration, vocational guidance and training programs for the unemployed. The results should also be useful in increasing the effectiveness of the Canada Manpower Service operation. Following signing of a contract

with the Department of Manpower and Immigration in March 1967, the Job Vacancy Survey Section was organized in the Labour Division with responsibility for production of job vacancy statistics. The officer in charge of the Section is also responsible for co-ordinating collection and interview operations carried out by the field staff of the Special Surveys Division. During the summer of 1967, mail and interview questionnaires were designed and a program of interviews of large firms in manufacturing was initiated to determine the locus of information in each company for reporting job vacancies. In September the first mail-out of questionnaires to large establishments in the manufacturing industry took place on schedule. Emphasis in the latter part of 1967 and early 1968 has been on the development, in co-operation with Sampling Surveys and Research Staff, and the Operations and Systems Development Staff, of a computerized system for sample selection, maintenance, mail-out of questionnaires, editing of returns and tabulation of results. Attention has also been given to expediting "profiling" of larger firms in additional industries and the recruitment and training of staff.

In the Analysis and Development Section the full implementation of the analysis and development program was deferred as a result of the reallocation of professional positions during the year. During the period, however, at the request of Treasury Board, an investigation of all labour survey activities of federal government departments was undertaken by the Section. This survey is designed to reveal areas of duplication of effort and to result in recommendations for elimination or reduction of these areas of duplication through arrangements for joint collection and consolidation of survey activities. It is expected that the report will be available by mid-year.

Senior Officers of the Division attended a number of international conferences, including the Inter-State Conference of Labour Statisticians at Toronto in June 1967, the annual meeting of the American Statistical Association in Washington in December 1967, and at meetings of the Committee on Labor and Social Security Statistics of the Inter-American Statistical Institute in Washington in March 1968.

Manufacturing and Primary Industries Division

The Division is responsible for the development and maintenance of a co-ordinated program of industry and commodity statistics in the fields of manufacturing, mining, forestry, fishing and energy. Information is obtained by means of several hundred current and annual "mail-type" surveys as well as a quinquennial "enumeration-type" survey. The

results of these surveys are made available to the various users in the form of publications, special statements or special tabulations.

To fulfill these responsibilities the Division is organized into eight main sections: Analysis and Development; Integration and Response Analysis; Metals and Chemicals; Foods, Beverages and Textiles; Forestry; Energy and Minerals; Shipments, Inventories and Orders; and Operations. A separate administrative staff is responsible for financial and personnel matters. This organization represents a significant change from the previous year and reflects modification to the Bureau's organization, the introduction of revised financial and personnel procedures as well as changes in statistical responsibilities within the Division.

An interesting development in the activities of the Division, other than those of a statistical nature, has been the emphasis on training programs at all staff levels. In total, 678 man-days were spent on courses covering such varied subjects as systems, financial and personnel management, statistical concepts and procedures and language training; the last mentioned accounted for approximately 50 per cent of the total. In addition to this program for divisional staff, officers participated in training programs for several foreign students who were attached to the Division for various periods during the year.

Again this year, emphasis was placed on improvements in timeliness, quality (involving the completion or continuation of several major projects undertaken in previous years) and the undertaking of several *ad hoc* projects as a service to major users.

Timeliness of the annual Censuses has improved somewhat over the previous year through the introduction of a series of preliminary bulletins. These provide the user with the following basic industrial statistics: (a) principal statistics - industry by province; (b) selected commodity statistics - by industry - Canada; (c) principal statistics - total manufacturing by counties, cities and census metropolitan areas; (d) principal statistics - seven largest metropolitan areas; and (e) summary statistics on size of establishments for Canada and the provinces. Bulletins covering the first two of these items have resulted in the release of statistics for some 30 industries of the 1966 Censuses and represents an improvement in timeliness of some four to five months. Bulletins related to the last three items have enabled summary data to be released on the 1964 and 1965 Censuses of Manufactures which are delayed due to the implementation of the computer print-out program.

The monthly commodity surveys, which provide detailed information on output, flows and disposition of commodities and which contribute significantly to the construction of the monthly *Index of Industrial Production* have undergone noticeable improvements in timeliness. Each survey was reviewed in terms of timing and response characteristics, and a concerted attack was made to improve response. Primarily as a result of this effort, the majority of the 73 surveys used in the construction of the Index now are available within an acceptable period. This in turn has resulted in an improvement of the release of the Index from more than 60 days to less than 45 days.

A final factor which will have an effect on the timeliness of industry publications for the Census of Manufactures is a recent change in the printing process. By changing to a simpler and cheaper process, printing costs are expected to decline and a significant improvement in the time spent in printing is forecast.

With regard to improvements in quality, the past year has seen the completion of "linking projects" involving the Censuses of Mining and Logging; the completion of tabulations for the quinquennial Census of Fishing and significant progress in developing formats for bilingual publications and questionnaires, all of which were reported upon in last year's report. It has not been possible to implement the Industrial Commodity Classification due to further revisions to accommodate the continuing requirements for the input-output tables. These revisions should contribute extensively to easier preparation of these matrices.

In addition to the foregoing, the Division was successful: (1) in broadening the scope of a number of industries in its annual Census of Manufactures so that commodity detail on materials used will be available on a continuing basis; (2) in introducing two new current commodity surveys dealing with carbonated beverages, and shipments of prefabricated houses and other buildings; and (3) in producing comprehensive total energy statistics at the national and regional levels for the years 1958 to 1964, which material has been incorporated into a paper "Principles and Concepts of Energy Statistics in Canada" to be delivered at the World Power Conference in Moscow, this coming year. It is also continuing the development work in connection with the probability sample for the monthly Shipments, Inventories and Orders survey. At present a number of programs have been written and will be under test within the next month. An interesting and beneficial side effect has arisen from the development of the probability sample universe. This expanded universe has been incorporated

into the present system and has resulted in an improvement in quality of the current provincial estimates, particularly in the Atlantic and Prairie Provinces.

Further improvements in the quality and usefulness of the data produced by the Division are to be expected as a result of participation in the Federal-Provincial Conference on Economic Statistics, the Federal-Provincial Conference on Forestry Statistics, the Provincial Mines Ministers' Conference and in numerous industry-government committees. An outcome of the Federal-Provincial Conference on Economic Statistics worthy of special note is a proposal for obtaining information on interprovincial and foreign shipments of selected commodities. During the past year, the provinces and DBS have been developing lists of specific commodities and surveys will begin during the coming fiscal year. The data obtained will be useful in studies concerning import replacement and industrial development.

A recent development which should assist materially in the publication of uniform statistics by DBS and the provinces as well as prevent the inadvertent disclosure of confidential data was the development of agreed-upon publication procedures by DBS and the provinces. This is an important milestone in federal-provincial statistical relationships, particularly because of its potential effects on suppliers and users of statistics.

Finally, in relation to quality of data, officers of this Division participated actively in the development of statistical concepts and procedures to promote international comparability. Numerous submissions were made to international agencies such as the United Nations and the Organization for Economic Co-operation and Development as well as various meetings concerned with international statistics attended.

Although emphasizing timeliness and quality, the Division undertook major research projects on behalf of other departments; for example, development of extensive statistical material for the Task Force on the Structure of Canadian Industry. A final point of interest is that the Division answered over fifteen thousand requests for information from a wide variety of users in the social and economic communities.

Merchandising and Services Division

The function of this Division is to collect and publish data on the retail, wholesale and service sectors of the economy, as well as to undertake numerous special studies and surveys in areas related to the movement

of goods from the manufacturing level to the final consumer.

A major reorganization of the Merchandising and Services Division was completed during the past year. The purposes of this reorganization were to increase the degree of flexibility and expertise required to ensure that divisional objectives could be met with a minimum of delay as well as to increase the Division's ability to participate in the new methods and procedures which are being implemented within many government departments at the present time. In general terms, the Division has been reorganized into five main sections: administration; current retail and wholesale; services and special projects; quinquennial census; and operations and methods development.

The collection and tabulation of data obtained from the 1966 quinquennial census of retail and service businesses (covering approximately 260,000 retail businesses and service outlets) proceeded according to schedule. During the first half of 1968, computer programs for card-to-tape operations were tested and most tabulation programs were set up. It is expected that the first results from the 1966 census of retail outlets will be released by July 1968 and that subsequent reports covering both retail and service businesses will be released during the remaining part of 1968.

Difficulties in publishing wholesale trade data caused a great deal of concern during the past year. It was necessary to postpone publishing the 1963, 1964 and 1965 annual wholesale trade data and to shift additional resources to process and complete the 1966 Census of Wholesale Trade by the end of 1968. When the 1966 Census is completed, efforts will be made to complete the 1963, 1964 and 1965 wholesale trade data. These data will be published in a special reference paper which is expected to be available during the first half of 1969. Because of the reallocation of some divisional staff, it was necessary to cancel the annual 1967 Wholesale Trade survey. It is hoped that this survey will be re-instituted for 1968.

The year now ended saw a rapid growth in the rate of activity in the current retail statistics program. With the completion of large-scale revisions necessary to transpose the current monthly series to a 1961 Census base, a special intercensal report was produced for the period 1961-1964 and preliminary revised data for 1965-66 were published in the January 1967 issue of the *Retail Trade* report. Later in the year, action was taken to reinstate the annual retail trade publication series, and the first such report since 1960--embodying final birth-death adjustments--was

published for the year 1965. As the year drew to a close, plans were being formulated for the publication of a similar report for 1966.

There were other equally important developments during the year in connection with the retail trade series, aimed primarily at effecting an improvement in timeliness of the published report. Possibly the most significant activity was assessing the possibility of computerizing the monthly retail trade series in order to produce early estimates. In co-operation with the Information Division, another development was the publication of a retail trade digest, entitled *How's Business?*, which is being mailed each month to every firm in the retail trade sample, in an effort to increase interest in the uses of retail trade statistics and to encourage the earlier mailing of monthly reports. The reaction from respondents has been highly favourable as evidenced by the heightened interest shown by these businesses. In addition, the production time for the monthly retail trade publication was substantially reduced and a further saving in time was realized with the earlier release of summary data on retail sales in the *DBS Daily Bulletin*.

In collaboration with the Sampling and Survey Research Staff, work continued on the planning and design of a new retail trade sample which is scheduled for implementation by January 1970. Various tests are presently being carried out to determine the type of sample which will yield optimum results in terms of sample size, quality of results and cost. The results of one test in the Province of Prince Edward Island are now being analyzed and further tests on a national scale will be carried out within the next year.

Although much of the year's effort was expended on the retail trade survey, activities continued apace in other fields as well. Following a series of discussions with interested business users, agreement was reached on a major conceptual change in the department store universe and a radically modified definition was implemented at the outset of 1968. Among the surveys affected by this change, in addition to the monthly *Retail Trade* report, were the weekly and monthly *Department Store Sales by Regions* percentage change estimates and the monthly publication *Department Store Sales and Stocks*.

A new survey of voluntary group stores in the grocery and combination trade, covering the 1963-65 period, was released during the year, and a companion study on voluntary group stores in the non-food trades was being readied for publication. Other annual reports in the continuing retail statistics program included *Shopping Centres in Canada*, *Vending Machine Operators* and *Retail Chain Stores*. In all

cases, these reports were subjected to a thorough examination prior to printing and changes were effected in format and tabular presentation, in order to increase their usefulness to business, government and other users of the data. In addition, the standard monthly and annual statistical series on chain store sales and stocks were maintained and published at appropriate intervals throughout the year.

Other developments of note included the completion and publication of the census monograph *Trends in Canadian Marketing* and the preparation of textual and tabular materials on merchandising for publication in the *Canada Year Book*, the *United Nations Statistical Handbook*, and other related publications.

During the past year, a survey of "direct selling" in Canada was developed. The data collected will cover 1966 and 1967 and will likely be published by the end of 1968. The results of this survey will indicate the extent to which goods are being purchased by household consumers through other than retail outlets.

One area of major interest to government and outside users (businessmen and the general public alike) is the publication of consumer credit statistics. A major effort is now under way to improve the quality and timeliness of the monthly reports. Discussions are being held with other divisions, government departments and agencies as well as with representatives of the Federated Council of Sales Finance Companies to assess the present program of consumer credit statistics and to recommend various steps which will improve the quality of the published data.

The past year saw considerable time devoted to discussions with the Construction Machinery and Equipment Distributors Association, as well as with firms in the industry and interested government departments, in order to devise a sales survey covering about 50 different machines and types of equipment handled by firms in this business. This is essentially a commodity survey, but is being carried out on an establishment basis with an effort being made to get information on construction machinery and equipment sales by all businesses, not only those primarily engaged in the activity. Although present plans call for this survey to be undertaken biennially, it may in future be carried out as an annual survey if sufficient resources become available.

Another major new survey undertaken during the current year was the Destination of Manufacturers' Shipments for 1967. Several meetings were held with various provinces in the development of this survey and there was

unanimous agreement that the results would be valuable to each province. This survey will measure, in value terms, by industry, the flow of merchandise from manufacturing plants to each province and region of Canada. It is expected that a report on this survey will be available approximately mid-1969. In addition, plans are now being formulated to carry out a similar survey at the wholesaling level for 1968. This survey will complement the Destination of Manufacturers' Shipments survey mentioned above.

The country grain elevator survey has traditionally been carried out every five years in conjunction with the Census. Formerly classified to the wholesale trade sector, it was included in such reports up until 1961. Although country elevators were reclassified to transportation in 1961, they have continued to be surveyed by the Merchandising and Services Division because of their deep involvement in trade through the sales of farm supplies. Consequently, a separate publication will be released in 1968 to cover operations of country elevators during the crop year August 1, 1966, to July 31, 1967.

During the past year, further study was made of the possibility of using National Revenue tax returns for some of the Division's statistical programs. The primary purpose for using tax returns would be to minimize the requirements on business firms to supply data to the Dominion Bureau of Statistics, as well as to achieve some cost savings in carrying out these surveys by DBS.

Studies have been initiated to determine the best approach to produce more current estimates of consumer expenditures in the service areas. At the present time, a number of significant service trades are surveyed annually; in addition, there is a monthly sample survey of restaurants. However, prior to expanding the coverage of the service trades, a significant amount of exploratory work must be carried out. Problems of classification, conceptual difficulties and appropriate sampling techniques to be used must first be resolved.

During the past year, plans were made to improve and increase the coverage of the monthly survey of wholesale merchants. A new sample was drawn and should become operative within the next few months. This new sample will enable the Division to publish sales estimates for 22 kinds of business rather than the present 18. Studies will be initiated shortly to determine the feasibility of producing inventory estimates for selected kinds of wholesale merchants from the new sample.

Tabulation of data for the 1966 survey of operating results of independent and chain food stores has commenced and the manuscripts

will be ready in May 1968. It is interesting to note that, during the year, operating results were published for 43 retail trades, 27 of which had not been surveyed for this purpose previously. Again, because of staff reallocations, it was necessary to cancel a number of operating results surveys for 1967 and 1968.

Prices Division

The function of the Division is to collect, compile and publish data on prices and consumer expenditure. To achieve this objective the Division is subdivided into - Retail Prices and Living Costs, Industrial Prices and Central Research. In the first group are included the measurements of retail price movements and price differentials as they relate to changes and differences in the costs of living and real incomes of population groups within Canada, and between Canada and other countries. Included also are family budget surveys and studies, securing and analysing cross-sectional data on family expenditures and family attributes. Industrial Prices, on the other hand, embrace measurements of price movements and differentials in the production and distribution of commodities and services, in which the primary focus is on prices of the outputs and inputs of individual industries and groups of industries within the Standard Industrial Classification. The Central Research group co-ordinates and integrates research and analysis in prices and provides a small nucleus of specialists in methodology.

The regular monthly issues of *Prices and Price Indexes*, which include all price statistics published by the Division, and the earlier released monthly issues of *Price Movements* in which selected sensitive price indexes are first published, were continued in 1967-68. Publications of a non-continuous nature are described in the following reports for the various sections of the Division. The general plan for an accelerated program for the improvement of price statistics which was approved at an interdepartmental conference of users held during the latter part of last year, and noted in the 1966-67 annual report, had to be largely postponed because of insufficient resources although some additional staff was acquired through a reallocation of Branch personnel. The plan as such still remains the program of the Prices Division but the achievement of the outlined objectives will be spread over a long period.

Although staff vacancies severely hindered implementation of plans for broadening the scope and improving the quality of published statistics in the Retail Prices and Living Costs area, some initial steps towards achieving the goals set were taken in the fiscal year 1967-68. The nucleus of a Comparative

Living Costs Section was established to provide a focal point for the consolidation and development of statistics for measuring place-to-place price and living cost comparability within Canada. A detailed exploratory study of retail price differentials among seven large Canadian urban centres neared completion by the end of the fiscal year. In connection with a review of the system of allowances payable to federal public servants stationed in remote areas, a program of experimental studies to measure comparative living cost conditions was initiated. This involved visits for the collection of data by divisional staff members to several Northern Manitoba communities including Thompson, Lynn Lake and Churchill as well as to Baker Lake, Rankin Inlet and Eskimo Point in the District of Keewatin.

The Retail Prices Section's activities during the 1967-68 fiscal year were mainly devoted to the solution of current problems arising in the production and publication of the Consumer Price Index. The reference base of the national and regional cities consumer price indexes is to be updated from 1949 to 1961 by the middle of 1968 in conformity with many other DBS series and work towards this end was well advanced by the end of the year under review. Internal organizational changes were initiated to facilitate more intensive screening of incoming price quotations and to extend the application of mechanical data processing, especially as related to the large volume of food prices received monthly. A program of regular head office workshop training sessions for field pricing staffs was started early in 1968 to effect closer technical liaison between the data collection and the index compilation functions.

Throughout the year activities in the Family Expenditure Section centred around analysis and publication of results from the 1964 survey, and planning for a similar survey in 1968. Following release of some basic results of the 1964 survey in May 1967, a selection of tables pertaining to this survey was published along with the feature article "Surveys of Family Expenditure" in the *Canadian Statistical Review* of June 1967.

In the first months of 1968 a recall survey of the complete family budget, referring to the calendar year 1967, was carried out in eleven large urban centres across the country. This survey, identical in locale, size and scope to that undertaken to derive 1964 expenditure patterns, referred to families and unattached individuals without restrictions of income or family size. Detailed tabulations of expenditures are anticipated from about 2,000 useable family records classified separately by sixteen family characteristics, including city, family income, family type and age of

head. Utilization of existing computer programs is expected to considerably improve timeliness in producing results.

To meet the requirements of the Canadian Government's foreign service allowance system, the International Prices Section analysed detailed surveys of comparative living cost conditions at over forty foreign cities to determine appropriate levels of allowance for public servants stationed abroad. In addition, the results of numerous previous comparative living cost studies for other locations were reviewed and updated in the light of current price and exchange rate situations, including the devaluation of sterling in November 1967. Officers of the Section visited various European cities in relation to this work as well as in connection with surveys of comparative prices and accommodation costs of military personnel serving at various bases in Western Europe.

In the Industrial Prices Section the particular emphasis given to the further development of price statistics covering capital expenditures resulted in a new publication *Price Indexes of Electric Utility Construction* which was released in July 1967. The publication included base weighted annual price indexes from 1956 to 1965, with 1961=100, for construction of transmission lines, distribution systems and switching stations. The indexes are based on labour, material and capital inputs into these facilities and marks completion of the first stage of development of price indexes covering all electric utility construction. Work is proceeding on other electric utility facilities, including steam and hydro generating stations.

During 1967, the price samples of both the residential and non-residential building materials indexes were overhauled and the revised indexes for the period January 1966 forward were published in the May 1967 edition of *Prices and Price Indexes*. The quality of price information now embodied in the indexes is improved by making extensive use of price data collected for the industrial selling price indexes. In addition, in the case of residential building materials index only, the commodities included in the index were updated in consultation with industry specialists to take account of changes in the materials used in house-building. Also, in the December 1967 issue of *Prices and Price Indexes*, revised and updated Highway Construction Price Indexes were published for seven provinces, including a combined provincial index; the indexes, as before, contain prices of the principal types of construction work undertaken in highway building. The updating of the series which were previously available only to 1963, revealed sharp price increases in the years 1965 and 1966 in this area of construction activity. The major improvements in the revised series stem from

more highly developed assessments of the reliability of price data used, and a refinement of the classification system to obtain a greater degree of homogeneity in the groupings of prices.

During the latter part of 1967 an intensive drive was launched to upgrade the quality of price data relating to producer durable equipment, with the dual purpose of ultimately publishing indexes of prices paid by purchasing industries for machinery and equipment, and of strengthening the selling price indexes of domestic producers of machinery. The work during 1967 consisted principally of planning, including field trips to major purchasers of capital equipment to obtain their assistance in improving and updating the items to be included in the above indexes.

Work continued on the revision of the Industrial Selling Price Indexes throughout 1967, and it is planned to publish the revised series in 1968. The revision includes an updating of the weighting system from 1953 to 1961, a changed time base from 1956 to 1961=100 and the introduction of the 1960 Standard Industrial Classification to replace the existing 1948 SIC and to permit comparability with other major economic statistical series. The revised series will initially cover, as a minimum, the period 1961 forward.

Planning for the conversion of the calculation of industrial prices from a manual to a computer operation commenced in 1967. It is not anticipated that the production of electronically processed price indexes will take place prior to 1970 but subsequent to that time benefits should be apparent in terms of improved timeliness of data release, an increased flow of published indexes and the availability of analytical reports which cannot be prepared by manual methods under present resource conditions.

Transportation and Public Utilities Division

The Transportation and Public Utilities Division conducts a comprehensive statistical program covering transportation and public utilities in Canada. The Division consists of three sections: the Aviation Statistics Centre, the Transportation Section and the Public Utilities Section. The first mentioned deals exclusively with aviation statistics including the work formerly done by the Transportation Section in this field, but also embracing the statistical work of the Department of Transport and the Air Transport Board. Transportation covers rail, road and water transport, while the Public Utilities Section covers radio and television broadcasting stations, telephone systems, telegraph and cable companies and community antenna (T.V.) systems.

In connection with rail transport, a number of developments delayed the production of a computer tape designed to enable Canadian railways to convert commodity statistics from the United States Standard Transportation Commodity Classification and report in terms of the Bureau's Standard Commodity Classification. The need to incorporate changes in the American classification, to maintain continuity, to enable users to bridge the break in the series, and to improve timeliness and quality, necessitated further detailed studies and reconsideration of the contents and format of the publications involved. The production of the magnetic tape and print-outs are now complete and reporting on the revised basis is to begin in 1968. By the end of the year, the volume of freight movements, monthly, will be available for publication on the basis of the present as well as the revised format. To improve the usefulness of the information for analytical purposes, arrangements have been made to drop the *Weekly Carloadings* publication as of January 1969, and produce a timely monthly report containing both the number of cars loaded and the tonnage carried for approximately seventy-five commodities as opposed to the present forty-eight. To continue to make available a timely economic indicator, it is intended to publish in the *DBS Daily Bulletin*, weekly carloadings in total only, beginning in 1969. The quarterly and annual *Railway Freight Traffic* publications will contain approximately 320 commodities as opposed to the present 265.

To further improve timeliness and for other reasons, it has been decided to delete individual railway company data from the monthly and quarterly publications and produce in the annual publications the details of the nine largest companies only, as a relatively few railways account for more than ninety per cent of the industry in terms of revenue, tons carried and ton miles.

In the water transport area, *Commodity Flow Charts* designated as Part VI of the annual *Shipping Report*, was released for the first time in the autumn of 1967. This publication shows in graphic form, foreign and coastwise movements of the eight most significant bulk commodities in Canadian waterborne commerce--wheat, other grain, pulpwood, newsprint, gypsum, iron ore, bituminous coal and fuel oil. The prime purpose of these charts is to depict the direction and density of such traffic on the Great Lakes, the St. Lawrence River and Atlantic coast.

A study of the feasibility of computerizing the shipping statistics has been completed and arrangements are being made to effect the conversion beginning with the January 1968 source documents. It is expected that this innovation will improve timeliness and reduce the amount of manual work required to produce the publication.

In co-operation with the National Harbours Board, a study is underway to review the extent of duplication in the collection and production of shipping statistics, the possibility of eliminating any such duplication and the feasibility of closer co-operation in areas of joint interest.

In the field of road transport, the Motor Transport Traffic Survey, initiated on a national scale in 1957, was discontinued at the end of 1967 for a number of reasons. A review of the methodology indicated that a number of important changes in the trucking industry in the last few years had, in effect, made the sample design obsolete. Among these changes were quarterly motor vehicle licences, reciprocity agreements between provinces and states, the growth of piggyback and containerization. Another important factor was the increasing emphasis by users on the need for more commodity information particularly on an origin and designation basis.

As the survey was originally undertaken to provide broad national trends relative to the size and make-up of the industry and to indicate its importance and competitive position, the sample was not designed to obtain detailed commodity information and indeed could not be adapted for this purpose.

Research is underway, however, to develop a new approach to obtain traffic statistics for this important industry, and it is hoped to devise a new survey for initiation in 1969.

During the past year, the Aviation Statistics Centre and the United States Civil Aeronautics Board, in close consultation, modified and redesigned their respective programs for the collection of air passenger origin and destination statistics in order that, beginning with 1968 data, the statistics separately produced will be compatible for the first time. The surveys are designed to follow passengers on scheduled airline services from the point at which they start their air journey to the farthest point, and to record their return journey. Use of a revised reporting form and new instructions in line with the agreed-upon modifications began on the first of January 1968. The new Canadian program includes intraline and stopover detail in addition to interline connecting points and carrier identification. Work has begun on the task of redesigning the complex system of computer programs necessary to produce material for the quarterly exchange of transborder origin and destination data with the United States; for a transborder origin and destination publication for release to the general public which will combine Canadian and United States data; and for the annual report on domestic origin and destination statistics and additional detailed routing information which the

Centre produces for the Air Transport Committee of the Canadian Transport Commission.

The airport and air route surveys have been expanded to include a number of municipal airports across Canada. This project was designed to meet the needs of the Department of Transport for information on aircraft activity for analysis of terminal facility requirements and other airport assistance programs. In order to bring reporting within the capability of limited staff at these airports, a simplified reporting form, designed to cover a week's activity, was devised and introduced. Through the use of more sophisticated computer programs, the Centre has effected improvements in timeliness and quality of the statistics concerning airports with air traffic control towers. Programs to facilitate analysis of data have been inaugurated, and peak day information is now available for small airports. Over the past year, six airports have acquired control towers and are now reporting to the "Airports with Tower" survey; 39 more airports are included in the "Airports without Towers" survey compared with the 1966-67 fiscal year.

An important first step in the co-ordination of the several Station Activity and Traffic Flow surveys was taken early this year when the Centre arranged for the provision by Air Canada of as much detail on domestic flights as it is now reporting for international flights at Canadian gateway points. Reports will be in the form of magnetic tape for use directly as computer input. With the implementation of this agreement, the Centre expects to be able to effect considerable improvement in cargo estimates which have previously been based on incomplete information. More precise station activity data will thus be provided for certain airports. It is hoped that similar reporting modifications can be developed for the other contributing carriers.

The programming for the computerization of the *Civil Aviation* report is well underway. Parallel computer and manual production is expected to begin shortly. With electronic data processing and an attempt to obtain returns earlier from reporting carriers, the timeliness of the publication can be expected to show considerable improvement.

Negotiations have been carried out throughout the year to complete plans for the amalgamation of the Statistics Section of the Air Transport Committee, Canadian Transport Commission, with the Aviation Statistics Centre. Formal transfer is expected to take place on April 1, 1968.

In the Public Utilities Section the joint DBS-Canadian Radio-Television Commission (formerly the Board of Broadcast Governors) reporting schedules, at the request of the Commission, have been revised and expanded to obtain additional information deemed necessary to enable it to carry out its increased responsibilities as defined by the new Broadcasting Act proclaimed early in 1968. These reporting schedules have also been revised to conform with a uniform classification of accounts produced and distributed by the Association of Canadian Broadcasters and endorsed by the Commission.

A glossary of technical terms for the Broadcasting Industry has been prepared and is expected to be published shortly.

During the year, coverage of the communications industry was extended by the initiation of a new survey of operating and financial statistics of community antennae television systems. This new survey is also designed to obtain the statistical information required by the Telecommunications Branch, Department of Transport, to carry out its licensing and other responsibilities.

SOCIO-ECONOMIC STATISTICS BRANCH

The Socio-Economic Statistics Branch is responsible for a wide range of demographic, sociological and economic statistics which deal predominantly with information about persons and families derived from household and institutional sources. They include the following: censuses of population, housing and agriculture; statistics on elementary, secondary, higher and adult education, vocational training and school finance; agriculture statistics; health, vital and judicial statistics; family income, assets and liability statistics. The Branch is also responsible for the field operations of DBS including the labour force sur-

vey, and eight Regional Offices, as well as for provincial liaison and consultative services.

The organization of the Branch comprises the following units: a small Branch headquarters staff; Agriculture Division; Census Division; Consumer Finance Research; Education Division; Health and Welfare Division; Provincial Liaison and Consultative Services; and the Special Surveys Division. The work of these elements of the Branch is described in the following paragraphs.

Agriculture Division

Besides maintaining a flow of data related to agriculture, the Division is increasingly active in devising improved data collection procedures to meet the rapid changes in the structure of agriculture and allied industries and to fulfil new data requirement. Increased specialization in agriculture is greatly magnifying differences in resources and in the allocation of resources between farms. Thus, sampling problems become more difficult and sophisticated sampling techniques are being gradually introduced to strengthen the data collection system. New data requirements result from the need to measure changes in resource allocations and the effect on incomes of farm people.

The Crops Section publishes a continuous and comprehensive flow of timely data and market information on field and horticultural crops in Canada. At the farm level much data is collected by means of mailed questionnaire enquiries of a sample of volunteer crop correspondents, seeking information on such topics as growing conditions, forecasts of acreage to be planted, probable yields and farm stocks and quantities of grain fed on farms. Although published reports usually refer to provincial totals only, the data for many items are tabulated by smaller geographical areas and made available to provincial authorities.

To integrate material from farm surveys with other available detail on grains and oilseeds, two comprehensive reports, the *Wheat Review* and the *Coarse Grains Quarterly*, are published. These publications collate and analyse national and international data and policy changes of importance to the production and marketing of the major commercial grain and oilseed crops. Detailed data on the movement of Canadian commercial grains and oilseeds are published in the *Grain Statistics Weekly*. Historical data are made available for reference purposes in a series of handbooks and in the annual *Grain Trade of Canada*.

Following the release of 1966 Census data, appropriate revisions in the annual acreage and production series were made for field crops for 1966 and the period 1962-65 inclusive. These revisions have been published. A monthly survey of the seed purchases and shipments by seed dealers and processors was instituted in response to request from the trade and producers.

An experimental enumerated random sample segment survey was instituted in twelve counties in southwestern Ontario. This program was carried through in co-operation with other sections in the Division and the Ontario Department of Agriculture and Food. Estimates of crop acreages and yields independent of the mail questionnaire survey were generated. This was designed, in part, to explore the nature

and importance of non-response bias in the voluntary response mail questionnaire approach. It also provides an opportunity to obtain unbiased quantitative response information on various farm practices. With the increased interest in resource allocation and economic efficiency in Canada, emphasis will be placed on the development of vehicles to measure changes in these areas.

The British Columbia experimental objective apple crop survey, based on fruit counts, was carried out for the second time in 1967. The Ontario winter wheat objective crop estimating work was also undertaken for the entire twelve counties included in the segment survey. The Saskatchewan fertilizer use survey was continued for the second year. A very considerable interest in this program was evident on the part of the trade, farmers and government officials.

The regular operating program of the Livestock and Animal Products Section included the monthly reports on the output of dairy factory products, fluid milk sales, estimates of production and farm value of milk and eggs, and on stocks of the principal food commodities held in storage; quarterly reports on the number of pigs on farms and sows to farrow forecasts; semi-annual estimates of other livestock and poultry on farms, annual estimates of meat and wool production and disappearance. Annual reports on dairy, livestock, poultry and eggs, and also on fur farm statistics, cover production, trade, consumption and other related data relevant to these areas of activity.

In addition to the regular operating program, efforts were made to apply probability sampling methods to livestock and poultry estimating procedures. Results obtained from two pilot projects undertaken suggest a broad area for application of these techniques into routine operational procedures.

The first study undertaken to generate livestock and poultry estimates by probability sampling methods was an enumerative type survey. The sample frame consisted of selected counties in southwestern Ontario, from which representative segments were randomly selected. Provision was made to obtain data on livestock and poultry numbers from open and closed segments which in turn permitted estimates to be generated within known confidence limits, by the open, closed and weighted segment methods. Tentative results obtained from this study show this technique to be highly satisfactory for estimating cattle and hog numbers, but not as successful for estimating sheep and poultry numbers. Further exploratory work in this method is planned for the summer of 1968.

A pilot project to estimate numbers of cattle on feed in Alberta was undertaken in mid-January of 1968. A secondary objective of

this survey was to study the implications and feasibility of applying replicated samples, drawn from a list sample frame, to livestock estimating procedures.

The vehicle used for collecting data for the cattle on feed survey was the mail questionnaire. Six independent samples of Alberta farmers with cattle, stratified geographically and by size of enterprise, were randomly selected from the 1966 Census lists which constituted the sample frame. Estimates generated by the six independent samples were within acceptable confidence limits and further developmental work is planned in the coming year with a view to applying the technique to other types of livestock and animal products.

A sample frame and selection of a sample has been completed to include Newfoundland in the monthly and annual estimates of egg and poultry production. It is expected that plans developed to date will be implemented early in 1968-69.

The Farm Finance Section conducted its regular semi-annual farm surveys of crop acreages, livestock numbers and disposition, farm woodlot production and farm wages. Estimates were prepared and published for indexes of farm prices and production, farm cash receipts and net income from farming operations, farm wage rates and farm capital. Estimates were also prepared and made available on request for the value of total agricultural production and value per acre of farm land. This Section was also responsible for publishing in 1967 a revised *Handbook of Agricultural Statistics* dealing with farm income and expenditures for the years 1926 to 1965. The revisions contained in this Handbook extended back as far as 1940 and were based on the most up-to-date information from private and government sources, including the Census of Agriculture and the 1958 Survey of Farm Expenditure and Income. These estimates also reflected changes in methods of calculation which have been developed in recent years.

A revised index of agricultural production containing all of the revised production data used in the revised income estimates was published in the spring of 1967. The preparation of measurements of physical inputs for the agricultural industry was continued during the summer. The rebasing of the DBS index of farm prices of agricultural products was started in the fall of 1967 and is expected to be completed during 1968. The Farm Wage Rate Survey, which up to the end of 1967 had been on a thrice yearly basis, was converted to a monthly basis. The acquisition of an additional professional to the staff permitted the launching of a program of research into methods, sources and concepts to be used in the improvement of estimates of farm product prices at the farm level.

The Special Projects and Research Section was involved in a project in the production of a master tape file for computer processing of farm mailing lists, which was completed in October of 1967. The master tape contains a data record for each farm enumerated in the 1966 Census of Agriculture, with the exception of farms located on Indian reserves. Information in the data record was obtained from the Census of Agriculture questionnaire. It consists of the farm identification codes, name and post office address of the farm operator, crop acreages, livestock and poultry numbers, and other selected characteristics of the farm. Data pertaining to most of the farm characteristics are coded for identification according to classifications used in the Census of Agriculture publications. The master tape file is intended to serve several purposes. Its main function is to provide information required for addressing the questionnaires used in the June and December Surveys of Crops and Livestock and a number of monthly, quarterly and seasonal surveys conducted by the Agriculture Division. In addition to the production of survey mailing lists, the master tape file can be used as a source of selected lists and classifications of farms for special surveys, and for research projects related to sampling and survey methods.

Census Division

During the year, the emphasis in the work of the Census Division began to shift from the 1966 Census of Population, Housing and Agriculture to planning for the 1971 Census.

Research projects designed to improve coverage, quality and timeliness of census data were initiated. During September 1967, a self-enumeration census data collection method using mail-out/mail-back procedures was tested in London, Ontario as a possible technique for use in the 1971 Census of Canada. For the test, approximately 62,500 questionnaires were mailed to London householders who were requested to complete the questionnaire and return it by mail. Slightly over 53,200 (85 per cent) were completed and returned. Questionnaires returned were edited and those found incomplete or inconsistent were followed up through a telephone interview. Those households failing to return their questionnaires were visited and interviewed by an enumerator to obtain the required information. The London Census Test indicated a need for further testing of questionnaire content and design, field and office operations as well as small urban and rural population-agriculture procedures. To meet this need, the testing program being developed for 1968-69 will include tests in Toronto, Verdun and four rural areas in the provinces of Nova Scotia, Quebec, Ontario and Alberta.

The processing and production of reports on the 1966 Census continued throughout the

year. Large quantities of computer-produced tabulations were received and examined; seventeen reports on population, one on housing and eleven on agriculture were published, and work was begun on the outstanding volumes and on analytical commentaries. As part of an operation to rationalize the control and storage of census material, some five million population documents from the 1966 Census and over half a million documents from the 1951 Census of Agriculture were microfilmed. The coincidence during the year of this regular work with the complex task of investigating new methods for the 1971 Census placed an exceptionally heavy burden on the staff connected with these aspects of the Division's activities.

The first three of a series of 1961 Census monographs appeared. The stated purpose of the 1961 Census monograph program is to provide a broad analysis of social and economic phenomena in Canada. Although the monographs concentrate on the results of the 1961 Census, they are supplemented by data from previous censuses and by statistical material from other sources. The first three concern urban development, the labour force, and trends in merchandising; five more, on a variety of subjects which include fertility and migration, were in the course of preparation. Further, the Division issued 21 Technical Memoranda and Papers, including a bibliography of Canadian demography, reports on aspects of 1961 and 1966 Census methodology such as publicity, comments on several demographic subjects such as the data on fertility from the 1961 Census, and descriptions of the current census test program; unlike the monographs, they are not on sale, but are generally available on request.

The regular series of quarterly and annual population estimates and of Canadian Citizenship were prepared for publication. The inter-censal estimates previously made for 1962-65 were revised in the light of 1966 Census results, and a special bulletin entitled *Revised Annual Estimates of Population for Canada and the Provinces, 1921-66* was completed. A new program to develop population projections for Canada was started in December.

Two innovations during the year may be mentioned. A Census Data (Use and Development) Section was set up, with the aim of improving communications and co-operation between users and producers of census information. The Geography Section collaborated with the Sampling and Survey Research Division in the initial design of a small area information system, by which census data in urban areas can ultimately be stored on the basis of unique grid co-ordinates and retrieved for any small arbitrarily defined area.

During 1967-68, the Census Division co-operated with the Central Classification Research and Development Staff of DBS and the

Occupational Research Division of the Department of Manpower and Immigration in the development of a standard Canadian Classification and Dictionary of Occupations (CCDO). The CCDO will reflect the latest changes in the occupational structure of Canada and will be used by the Division to classify occupational responses in the 1971 Census. Since it will be used by all government departments, the CCDO will permit interdepartmental comparisons of occupational data collected from a variety of sources.

Numerous routine activities continued. The number of requests for evidence of age by reference to early census and national registration records grew from 54,000 last year to 57,000, and at one period a night shift was employed to avoid delay in handling. Other requests for all kinds of census data also increased in number, being received from provincial governments, universities, commercial concerns and individuals all over Canada. Co-operation was given to the Economic Council of Canada in preparing its Staff Study number 19 on population and labour force growth. Assistance was provided in the planning of surveys of housing in the Yukon and of manpower in the Northwest Territories; to a committee on the relocation of settlements in Newfoundland; and to interdepartmental committees in designing a program to outline census statistical areas on about 2,000 topographical maps. A committee was created to re-evaluate concepts applicable to Census Metropolitan Areas, and methods of producing statistical maps by computer were investigated.

Various members of the professional staff represented the Division and the Bureau at a number of international meetings held throughout the year including the American Statistical Association, the Conference of European Statisticians and the Population Association of America. Numerous meetings were also held with various user groups to discuss plans for the 1971 Census, particularly on subjects requiring early attention such as the all-important matter of questionnaire content. The groups involved represented many diverse interests - governmental (federal, provincial and municipal), professional and academic associations, as well as planning boards.

Consumer Finance Research

During the year under review, the preliminary results of the 1966 Survey of Consumer Finances, which collected income data for the year 1965, were released. This was the first DBS income survey to include farm families as well as non-farm families and thus the first survey to provide estimates of the income distribution of all Canadian family units. The statistical report of the results is nearly completed and will be released in the next

fiscal year under the title of *Distribution of Incomes in Canada by Size, 1965*. As well as statistics for all families, the report will contain data on non-farm family income to provide comparability with statistics in earlier reports. The report will provide statistics on the income distribution of persons 14 years of age and over as well as families, similar in scope to the statistics published in *Distribution of Non-Farm Incomes in Canada by Size, 1961*.

Planning of a new income survey to be undertaken in April 1968, for 1967 income data, was completed. This survey will have several new features. As in the previous survey farm families will again be included but the sample size is being expanded from 12,000 to 30,000 households, the largest such survey ever undertaken by DBS. It is hoped that this will permit better regional analysis of income characteristics. In addition to income, the survey will collect information on economic and demographic characteristics of income recipients such as age, labour force status, occupation, industry, immigrant status, education, work history and duration of employment. Statistics will be published on family and individual incomes. For four-fifths of the sample, statistics will also be collected on household facilities and equipment - age and size of dwelling, car ownership, and ownership of appliances. For the first time since the 1961 Census it will be possible to analyse housing characteristics by family income level and family characteristics. The results of these surveys will be released in a series of reports.

Work is nearly completed on a special report on income trends in Canada for selected years between 1951 and 1965. In addition to statistics on the income distribution expressed in current dollars, the report will contain income distributions by selected family and individual characteristics in 1961 constant dollars. The characteristics of family units by quintiles will also be published. The report is expected to be released in mid-1968 and, in future, constant dollar and quintile series will probably be incorporated in the main publications of survey statistics.

Revisions of the Census monograph *Incomes of Canadians* which analyzes income data collected on the 1961 Census of Canada and on the Surveys of Consumer Finances were completed. The publication will be released shortly.

Work was continued on the development of annual estimates of aggregate income by counties and census divisions. A series covering the years 1961 to 1966 should be ready in the next fiscal year. A special reference paper will be issued when the estimates are completed. It is intended to eventually publish the estimates on an annual basis.

The staff collaborated with the Department of National Revenue, other DBS staffs and other departments on the planning of improvements in taxation statistics to meet needs for current data on municipal income statistics and migration statistics between localities and provinces.

In addition to the above projects, work was continued on a number of methodological and research studies such as evaluations of survey and census data, and analysis of the characteristics of the farm population by farm characteristics. The staff participated in the planning of 1967 and 1968 Census tests and in the planning of evaluation studies.

The Co-ordinator of the staff was loaned on a part-time basis to the Economic Council of Canada to assist in the preparation of the Council's 1968 Annual Review. The Co-ordinator also represented DBS in Geneva at a working meeting of the Conference of European Statisticians called to discuss development of household income, expenditures and financial statistics as complementary systems in the National Accounts framework. In addition, the staff participated in a number of DBS internal committees, interdepartmental committees and intergovernmental committees on subjects such as research needs, minimum budgets, economic statistics programs, and census planning.

Education Division

Education is in a constant state of change and demands for information change more or less rapidly.

It is of considerable importance to educationists and to authorities concerned with the labour market to have information on students dropping out of school, in what numbers they are leaving school, the extent of their education, and the occupations they are entering. Four public school systems (including Indian Affairs and Northern Administration) are now collecting reports on individual pupils leaving school for processing by the Education Division. This method has been adopted experimentally for secondary schools in a fifth provincial system and a sixth province is using the system on its own.

In the fall of 1967 the Elementary-Secondary Section revised its questionnaire on teachers to include such items as year when university degrees obtained, patterns of mobility and size of instructional unit.

In co-operation with two universities, the collection of statistics on students taking extension courses, and in connection with statistics on enrolments in summer courses for teachers, resulted in improved reporting to DBS.

During the year, the Vocational Training Section assumed federal responsibility for the collection of data on public vocational education at all levels. The consequent reorganization involved continual negotiations throughout the last half of the year with provincial departments of education, soliciting their co-operation in the collection of the required data. Forms were redesigned and new arrangements made for collection. Despite staff shortages some progress was made in updating publications.

A brochure was prepared listing the courses offered by over one hundred technical and vocational institutions. This has proved very popular and useful to vocational counsellors and to prospective students. Close collaboration with the Canadian Nurses' Association resulted in the introduction of a regular survey of salaries and qualifications of faculty members in training schools for nurses. During the year, work on a special survey of *Organized Training in Four Industry Groups, 1965* was completed and the results published.

Canadian university students who are interested in pursuing graduate studies are very much interested in what bursaries are available to assist them in furthering their studies. To meet this need the Higher Education Section, by means of a survey of all known sources, prepared a list of over 1,500 *Awards for Graduate Study* available to Canadian students. This publication dated 1967 was published early in the fiscal year.

The Division maintained its regular publications on adult education and libraries, and released a total of twenty-five publications covering all areas of education.

There is increasing interest in the education of exceptional children - those who differ so far from the normal as to require special educational facilities. In recognition of this growing interest and of the expanding facilities being used in education of such children, the Education Division surveyed all special schools, classes and teachers, both public and private. Results were published during the year under the title of *Statistics of Special Education for Exceptional Children*.

A survey of automated teaching and learning devices in communities of 40,000 and over was made, and another of teachers in teacher-training institutions was carried well on towards completion by the end of the period under review.

Within recent years the Education Division has been faced with a growing demand for forecasts particularly of enrolments, teachers and expenditures. These demands have come from the Economic Council of Canada, several

federal government departments, all the provincial governments, provincial economic councils, provincial commissions or boards for higher education, publishers, industry, business firms, market analysts, research students and international organizations. Some of these have been requests for specific forecasts, others of more general type.

Division staff worked with staff of the Economic Council of Canada in the preparation of education projection, which were released in the Economic Council Staff Study number 20, *Enrolment in Schools and Universities 1951-52 to 1975-76*. As a result of the work on projections, the Division was able to begin publication of an annual *Advance Statistics of Education* at the beginning of the school year giving estimates of schools, teachers, enrolment and finance for the year then beginning.

In the area of education finance statistics, special enquiries increased in both volume and complexity and material was prepared for the federal-provincial conference on the support of post-secondary education. Two special reports were prepared for UNESCO. In mid-year a new regular survey was begun on the budgeted education expenditures of federal government departments, agencies and corporations. The purpose of this survey is to ensure continuity and comparability of reporting and to provide for a reliable estimate of expenditures in the ensuing fiscal year.

Health and Welfare Division

This Division is responsible for the production of statistics on the state of health of the Canadian people, and on the enforcement of law and administration of justice in Canada. Four sections share the responsibility for producing statistics on health. The Vital Statistics Section is concerned with the events of birth and death, as well as with those of marriage and divorce. In particular, it carries out studies on natality, mortality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in general and special hospitals and in tuberculosis institutions. It is also concerned with the incidence of a number of communicable diseases. The Mental Health Section, which was formed this year, is responsible for patient characteristics and patient movement as these relate to mental disorders and psychiatric facilities. The fifth section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments,

courts, correctional institutions, the Penitentiary Service and the National Parole Board. The Division also conducts non-repetitive special investigations, e.g., medical and dental care.

Tabulations requested by research specialists, governmental, and other organizations in the field of mental health were many and varied. New, more useful tabulations organized in terms of type of psychiatric institution and giving detailed information concerning the aggregate days of care were prepared for publication in *Volume I - Institutional Admissions and Separations* and *Volume II - Patients in Institutions*. Work was begun on special reports dealing with expectation of admission to a psychiatric institution, retention ratios based on cohorts of individuals selected in terms of appropriate variables, and separation rates based on population at risk.

Many Private Hospital Schools for the Mentally Retarded were visited with the intention of bringing these institutions into the mental health reporting system. The program to bring Residential Treatment Centres for Emotionally Disturbed Children into the reporting system was continued. Also, initial planning was started for the inclusion of all psychiatric patients in general and allied hospitals (estimated at over 65,000 or almost 50 per cent of separations) not now covered by the reporting system.

New tabulations designed to explore relations between mental patients, physicians, and hospitals were introduced. Planning for future development, including coverage of virtually all inpatient facilities and improving the quality and timeliness of the data, continued to receive a great deal of attention during the year.

As in the past, the Division published information on the medical, social and other characteristics of patients confined to general and allied special hospitals, and tuberculosis sanatoria. The Division issued a fourth report (1964) on morbidity, in general and allied special hospitals, showing detailed diagnostic information for nine provinces. This work represents a significant addition to morbidity knowledge in Canada and constitutes the only available source of information in Canada for many conditions and diseases. Substantial information for disease research is also tabulated and stored in the divisional reference library to answer special requests for more detailed age-sex breakdowns than could be published. The Division also hopes to release, during the coming fiscal year, a publication dealing with surgical procedures carried out in the hospitals. In this area much valuable and currently unavailable information will soon become available for study

in conjunction with the incidence of disease and the classification and utilization of hospitals.

Besides the work on morbidity in general and special hospitals, the regular monthly and annual reports on the incidence of tuberculosis were published. An important innovation in the tuberculosis field is that, starting with 1966, information was also received on outpatient chemotherapy as well as inpatient treatment, making the compiled data much more comprehensive and useful in the study of this disease.

The Division issued weekly bulletins on the incidence of communicable diseases for the benefit of public health authorities and exchange of current information with the World Health Organization, Pan-American Sanitary Bureau and the United States Department of Health. The figures of weekly incidence were later compiled into an annual report for the year. Tabulations of certain venereal infections reported to the Division were forwarded to the Department of National Health and Welfare for inclusion in a special report.

Many special requests for morbidity information were answered. These came from federal and provincial government departments, from medical researchers, commercial concerns and individuals. The requests have varied in their nature. The information provided has ranged from data on hospital utilization to incidence of specific diseases and disabilities and an experimental study of the value of hospital records for selecting congenital defects.

The Division met its statutory obligations in the field of vital statistics by preparing and publishing the regular series of reports, and by supplying the provinces with basic tabulations for births, stillbirths, marriages and deaths, as required under Dominion-Provincial agreements.

More frequent this year than ever before have been requests for intensive investigations of the patterns of nuptiality and fertility. These latter requests have been occasioned by the recent drastic changes in the birth and marriage rates in recent years. New developments in hospital and medical care have added to the already considerable flow of demands for information on mortality due to particular causes. Most of these varied special requests required special calculations and compilations, as the information demanded was not available in any published form.

To meet these and a number of other demands at once, as well as at the same time satisfying special interest groups, several analytical studies have already been published,

and others are planned. These studies relate to cancer, accidents, heart disease, foetal and infant mortality, nuptiality, fertility, and life expectancy, and deal with the latest trends in these areas and seek to elucidate factors associated with the direction and magnitude of the trends. Besides a planned special life expectancy study, a series of annual life tables is being initiated, to serve as a general reference for those interested in survivorship, and for government and other bodies responsible for long-term projections and planning. These reports and studies have been supplemented by a series of technical reports which deal with methodological techniques of life-table construction, statistical measures of trends, and techniques for projections of births, marriages and deaths.

In order to meet the needs of subject-matter specialists and epidemiological researchers, and to accelerate the release of current data, a new annual report on mortality from detailed causes of death was initiated, and the release of 3 separate annual reports is planned, dealing with births, marriages and deaths, to replace the present combined report. Calculations on 15-year projections of births, marriages and deaths were initiated as the base for population projections. The Division also collaborated in methodological studies relating to inter-censal estimates of population.

Since 1945, the Division has been preparing alphabetic registers of births, marriages, and deaths on behalf of the provinces and the Family Allowances Administration. It would be agreeable if this task, which is not directly statistical in nature, could be carried out by some other body; negotiations to this end, and investigations into suitable alternative methods of supplying the listings, have been continuing.

Each year the Division provides the Vital Statistics Council for Canada with its secretariat service. In addition to work immediately associated with meetings of the Council or of its committees, the secretariat service is usually involved in the examination of a number of problems designated by the Council. Some of these problems relate to legal and administrative features of the vital statistics system, while others extend to the general sphere of social statistics. As an illustration, the secretariat made arrangements, on behalf of the Council, for a full investigation and redesigning of the present registration forms used by the provinces, involving collecting views, summarizing opinions, and circulating results to all Council members. One of the objectives of this investigation was further standardization of content, size and format of the re-

cords used by all the provinces, subject to local legal requirements where some variation is inevitable. Since the records serve both legal and statistical purposes, provision must be made for meeting both requirements. The anticipated benefits will be both administrative and statistical; there will be cost economies, a new convenience in processing, a new ease of record exchange, economies in storage of the forms, and other advantages for the provincial administrators. At the same time the statistical usefulness of the schedules will also have been thoroughly reviewed.

The Institutions Section's programs for the production of a comprehensive series of management and reference statistics on the activities of general and allied special hospitals, mental institutions and tuberculosis sanatoria has continued to be improved. Some important progress has been made in timeliness of publication for the eleven annual volumes and further improvements are planned in future years through extension of field edits, and other refinements. The Section has also received and answered many special requests from unpublished data in all three areas.

In co-operation with the Canadian Hospital Association and the Canadian Nursing Association, a salary survey of graduate nurses employed on a full-time basis in public general and allied special hospitals was undertaken for the first time in 1967. The survey response was excellent and the results were released in preliminary form in March 1968. A more detailed report is planned for later release. It is anticipated further surveys will be undertaken in co-operation with the above two agencies and other federal government departments on a regular basis.

The revisions to the Annual Return of Hospitals, Part I - Services and Facilities, and Part II - Finances, originally planned for introduction in 1968 have had to be deferred until the 1969 reporting year. These forms used by the provincial hospital insurance plans as well as by the federal government have gone through a series of revision meetings. Staff resources of the Section have been deeply committed to the development of forms as well as detailed definitions and instructions. Staff officers have also co-ordinated the work of the Canadian Hospital Association in their development of a new Canadian Hospital Accounting Manual (CHAM) to ensure compatibility between the Manual and the Annual Return of Hospitals, Part II-Finances, which are very detailed financial statements.

Planning for the revision of the mental institutional returns has also received attention during the year. The development of more management-oriented statistics on a national

basis appears to be now feasible. The development of performance and workload indicators to meet provincial and national requirements is also proposed for this area.

Discussion and planning has been carried out for the implementation of a quarterly series of hospital statistics to meet the continuing requirements of a number of agencies and groups. A wide variety of users are pressing for hospital data which could be met from such a program.

During the year officers of the Division took part in discussions with officials of other departments and with medical groups regarding those health manpower statistics that could be related to the provision of comprehensive health services. Officers also participated in federal-provincial meetings where discussions concerned the potential contributions to statistical knowledge that the processing of common core claim cards, filed under comprehensive medical care plans, would produce, as well as other matters. This statistical knowledge would go beyond the medical component of health manpower to cover practically all the more serious illnesses, to specify their diagnostic distribution, to indicate the medical attention, medically specified and administered treatments these diagnostic conditions called forth, in terms that identify the ill persons, their area of residence, and the medical specialties involved. At the same time, the Division has arranged for a series of supplemental questions about medical care to be placed on the regular Labour Force Survey as supplemental items, in order to provide a measure of the volume of medical contacts, by type, for the whole population. Two of these supplements have already been administered. The results of the series will be published in several occasional reports.

The Division also arranged for one question concerning the volume of dental care in 1967, to be asked on the supplement to the February Labour Force Schedule. This question was requested by the Department of National Health and Welfare, but private groups and associations have also requested information on the distribution of dental care. The results of this survey will also be published.

The Judicial Section is responsible for national statistics on law enforcement, the administration of justice and corrections, including crime, delinquency, traffic enforcement, police administration, adult courts at the trial and appeal levels, juvenile courts, penitentiaries, prisons and reformatories, training schools, parole and such continuing special studies as murder statistics. A total of sixteen reports, statistical supplements, manuals, and papers were published by the Judicial Section during the year. All an-

nual reports for 1966 were published except *Statistics of Criminal and Other Offences* (1965). Earlier release of these annual and preliminary reports led to increased requests for special tabulations by the users.

Work continued on the development of statistical series which permit the integration of information from each of the agencies involved in the administration of justice; the police, the courts and the correctional and after-care services. In one province a system developed jointly by provincial and Bureau personnel has been introduced linking police, courts, and institutions. This system has been designed to meet the administrative requirements of the provincial authorities and to permit studies on the efficiency and effectiveness of the process of justice. In a second province another program has been developed which will provide more complete and accurate statistical data. Plans have been discussed to link the correctional services into this police-court system. Planning sessions have been held with two other provinces on the development of integrated systems for adult and juvenile statistics. These programs were explained at a meeting in Washington, D.C., which was called by the United States Bureau of the Census following the publication of the report of the President's Commission on Crime.

The Division continued work on the development of a continuing recidivist study to cover all persons released from penitentiaries. A second pilot study was conducted covering all inmates released in a nine-month period.

Division officers participated in the federal-provincial conference called to consider changes in the Juvenile Delinquents Act. The Bureau's responsibilities and program revisions were presented to the delegates in a paper presented at the conference. Statistical tables were prepared to assist the delegates in their deliberations.

The Division has completely revised the National Parole statistical program to provide additional statistics on paroles granted or denied.

The Division, under contract with the Solicitor General's Department, is undertaking a study of the educational and training standards of all policemen in Canada prior to the establishment of a national police college. At the request of the Canadian Association of Chiefs of Police a special two-year study on robberies has been developed for the years 1968-1969. A revision of the data submitted by the Canadian Bankers' Association on selected offences against chartered banks has been proposed to expand the usefulness of this study. The number of field visits to police respondents reached a record high of over 200.

In addition, more information concerning the sociological and economic conditions of the areas policed by municipal police forces has been obtained to determine the nature and extent of factors contributing to the quantity, quality and consistency of reported data.

Special tabulations of reported data are compiled periodically and used internally and in the field to assess and discuss rates, percentages and ratios against national averages. Very favourable results have been noted in the quality and consistency of reported data as well as a significant reduction in the number of non-reporting and delinquent respondents.

At the request of the Canadian Association of Chiefs of Police a draft of a Police Records Manual was completed by the Division in consultation with members of some police departments. Adoption of the system is being considered by a special committee of the Association. A great deal of interest is evident in a basic police records system produced earlier, primarily for the use of small police departments where there is a need, and this system has been adopted by a number of police forces.

A new series of historical tables based on the Uniform Crime Reporting program has been developed to show the annual variation in offence and persons charged data by offence classification, including per cent unfounded and cleared, rates per 100,000 population and ratio of persons charged to offences cleared by charge.

Special Surveys Division

Through its eight Regional Offices located in St. John's, Halifax, Montreal, Ottawa, Toronto, Winnipeg, Edmonton, and Vancouver, the Special Surveys Division is responsible for all field survey activities of the Dominion Bureau of Statistics and for providing facilities and services to encourage use of DBS data in each region.

Through these Regional Offices, the Division conducts a monthly Labour Force Survey which involves employment of over 800 part-time interviewers who obtain information by personal interview each month from a probability sample of 36,000 households located in some 400 different locations across the country. Questions on labour force activity are asked each month and the resulting monthly bulletin *The Labour Force* presents detail of employment and unemployment in Canada. During the course of these interviews, information is also obtained relating to other matters of current interest. As an illustration of the variety of information so obtained, questions relating to the following topics were included

with one or more of the monthly surveys - Household Facilities and Equipment; Rents Paid; Child Care Arrangements Used by Working Mothers; Overtime and Premium Pay; Occupational Mobility; Medical Consultations; Dental Care; and Smoking Habits.

Another important activity of the Regional Offices is the collection of monthly data on retail prices of commodities and services used in the compilation of the Consumer Price Index. This index is largely based upon prices for some 300 commodities which are collected by the Regional Office staff in representative retail outlets in 30 of the larger cities of the country. During the year, the pricing program was expanded by extending coverage to a larger number and a more representative group of retail outlets and to a number of new cities. A special survey involving the collection of detailed information on family expenditures from 2,000 households was also conducted as part of a continuing program to refine the weights associated with component items of the Consumer Price Index.

During the early part of the year, a new quarterly Job Vacancy Survey was started which will be progressively expanded over a two-year period to provide current estimates of job vacancies in all sectors of the economy. A new unit was established in each Regional Office for this purpose and new staff was acquired throughout the year as survey activities expanded. One of the first tasks was to conduct "profile interviews" with senior officials in the larger manufacturing firms. The purpose of these interviews was to determine those officers who were closely associated with staffing functions and to clearly define those particular occupational groups or units within the firm for which each could individually report. In this manner, "reporting units" were defined within each firm. The survey methodology involves mailing questionnaires at periodic intervals to all such reporting units and interviewing a sample of the reporting units to determine reporting errors. The results of these interviews permit the application of correction factors to improve the accuracy of the resulting job vacancy estimates. Profile interviews for the larger manufacturing firms have now been essentially completed and similar interviews for other industrial sectors have been started and will continue into the new year.

Regional Offices also collect business reports for almost all subject-matter divisions of the Bureau. Each office maintains a reference library of all DBS publications for the convenience of those wishing to obtain assistance or to refer to DBS data. A new development during the year saw the appointment of a Statistics Use Development Officer in the Montreal office. A similar position

has been established in the Toronto office but has not yet been filled. The objective in establishing such positions is to develop, within the business community, a more complete awareness of the extent and nature of DBS data available and how it can be used to advantage.

Provincial Liaison and Consultative Services

The Co-ordinator of Provincial Liaison and Consultative Services visited most provincial capitals for informal discussions with provincial government statistical officers and economists concerning present and potential DBS programs, regional statistical requirements and related matters. Consultation was provided to numerous organizations monthly in the assembly of statistical infor-

mation for specific regions. The staff, in co-operation with the Department of Indian Affairs and Northern Development, undertook a Manpower Test Survey of the Northwest Territories, from determination of concepts to analysis of data.

The staff also provided organizational and secretarial service to a number of federal-provincial conferences and meetings held in the fiscal year among which were the following, not mentioned elsewhere in this report: - in May 1967, the Sixth Federal-Provincial Conference on Economic Statistics; June 1967, the Federal-Provincial Subcommittee on Statistics Legislation; March 1968, the Federal-Provincial Subcommittee on Census and the Federal-Provincial Subcommittee on Statistics Legislation and Residual Disclosure.

OPERATIONS AND SYSTEMS DEVELOPMENT BRANCH

The Operations and Systems Development Branch consists of a small central staff concerned with branch administration and planning, the Tabulating Services Division which provides a range of mechanical and electronic data processing services, the Central Programming Division which provides to most DBS staffs the professional skills and advice required to use computer methods, the Management Services Section which advises on the organization and use of office staffs, and the Central Registers Section which provides industrial and geographical classification codes for all establishments covered by regular DBS surveys, and assists in eliminating duplication among and ensuring full coverage of these surveys.

The Operations and Systems Development Branch has no program of its own; it exists solely to service the needs of the statistical and administrative branches of DBS. There have been no changes in the functions of the Branch over the past year. The organization of the Branch has been modified to improve its ability to provide service; in particular, four sections have been established in the Central Programming Division, each charged with providing necessary services to one or more branches of DBS, and there has been a preliminary regrouping of functions within the Tabulating Services Division. Further modifications will be made over the next year or so, but these are not anticipated in the present Program Review.

In addition to the divisional work described below, senior officers of the Central Programming and Tabulating Services Divisions

continued their participation in equipment studies. Specifications for a new general-purpose computer to replace the aging machine acquired in 1960 were completed, approved by the Treasury Board, and sent to tender. Studies of optical scanning equipment continued, and the technology of two such devices was tested during the year. Alternative computer service bureau facilities available in Ottawa were also given comparative tests to determine their suitability for particular DBS applications.

The resources of the Branch were supplemented during the year by two contracts with System Development Corporation of Santa Monica, California. The first contract was for a study of data processing operations in DBS, and provided a series of recommendations which have assisted in planning the transition to modern computing equipment. The second was for assistance in developing an evaluation plan for the selection of the most suitable available computer for general statistical applications. We expect to continue our use of consultants to assist in improving various aspects of our data processing operations.

Tabulating Services Division

The Tabulating Services Division provides facilities to process the data gathered by subject-matter divisions of DBS, and reduce it to more manageable form for further analysis or publication. When a minimum of cross-classification is required, aggregates and averages may be obtained by peg-bar methods

of compilation, using comptometers and desk calculators. For projects which involve more complex cross-classifications or necessitate more difficult and rapid manipulations of the data the Division uses:

- (1) a large key punch section with over 100 key punch-key verify machines;
- (2) a wide variety of unit record (punched card) equipment including sorters, collators, reproducers, interpreters and card proving machines;
- (3) a large computer installation consisting of 1 medium and 2 small-scale electronic computer systems. Towards the end of the year one of the small-scale systems was upgraded to medium size, and Treasury Board approved the acquisition of additional memory for the other.

During the year some 32 million punch cards were used in total, of which about 21 million were key punched by some 125 key punch and key verify machine operators. The evening shift which was introduced in 1967 has proven highly successful in providing additional capacity without an increase in space and machine requirements.

Editing of the data by mechanical means and seeking out inconsistencies which may arise through misinterpretation of instructions governing the collection of data, and errors in recording answers, are important functions of the unit record sections and computer centre. Tabulations produced after completion of the editing process are increasingly used directly as photo-copy for printing publications. Tabulation work has now been fully transferred to computers, but sorters, collators, and other card handling machines remain useful in preparing data for simple computer processing.

The DBS computer installation now consists of an IBM 705 computer system and an IBM 360/30 computer system (both medium scale by present standards), an IBM 1401 small-scale system, and peripheral equipment. The computer centre normally operates on a 3-shift, 24-hour day, 5-day week basis. Early in the year some weekend work was included to maintain schedules and meet target dates. Commencing in October, this was extended to a full 24-hour day, 7-day week basis. This has yielded some 7,300 hours on the 705 system and 15,000 hours on the 1401/360 systems producing in excess of 3 million sheets of original tabulation.

Most of the time and effort of the Division is allocated to the work of the Bureau. A few requirements of other government departments and agencies are still accommodated on a cost-reimbursement basis. In February 1968, a terminal was installed in the computer centre providing a link with a UNIVAC 1108 system in a commercial installation located in down-

town Ottawa. This system, and those installed at the Central Data Processing Service Bureau, are being used to an increasing extent to supplement equipment installed at DBS and to obtain special features not available on in-house equipment.

During the year the organization of the Division was modified to improve co-ordination and service capacity. These modifications are regarded as a first step towards building the improved organization which will be necessary to make effective use of a large-scale "third generation" computer operating on several programs at the same time.

Central Programming Division

The Division was reorganized early in the fiscal year to provide better service to the newly created Branches within the Bureau. Four positions were allocated to provide a Programming Service Section Chief for each of the two larger Branches, and for two other groups of Branches. Each section chief was made responsible for a number of teams each consisting of a senior systems analyst and three or more junior analysts and programmers. Each team attends to the requirements of one or more subject-matter divisions. This reorganization, the creation of more units, and the need to provide training for a large number of new recruits placed a severe strain on the experienced analysts and programmers on the staff.

As in past years, recruitment of experienced programmers did not meet requirements, but recruiting of university graduates as programmer trainees was successful. One internal (DBS) competition was held. As a result of an intensive recruiting program by the Public Service Commission Staffing Branch, the Division had no vacancies at the end of the fiscal year. There were 39 additions and 13 separations during the year.

A total of 1,195 days of formal training was given to staff members. This includes 813 days of computer courses and 382 days of language and other training, but does not include on-the-job training.

Requests for programming services continued to increase. Three major factors contributed to this increase: (a) accelerated requests to process more DBS surveys by computer; (b) the 1967 Test Census overlapping the processing of the 1966 Quinquennial Census; (c) the necessity for reprogramming surveys and special requests due to overload on the main DBS computer system. Not included in the above, but contributing to the load on senior and experienced staff, were the planning, specification writing, development of evaluation techniques, and benchmark programming, required for the

acquisition of a new large-scale computer and optical scanning equipment.

Manpower was provided for a nation-wide survey conducted by the Pay Research Bureau and for Personnel Selection Boards and Manpower Inventory Boards conducted by the Public Service Commission. Staff members attended seminars, meetings and demonstrations in New York; Rochester and Minneapolis, Minnesota; Washington; Quebec City; Houston, Texas; Los Angeles, California; and Endicott, New Jersey.

A total of 848 programs were written during the year for use on the three DBS computer systems, and on the Central Data Processing Service Bureau, university and commercial service centre installations.

Management Services Section

This Section provides a departmental consultative service to assist officers of the Bureau in improving the efficiency of their operating staffs. As originally planned, the Section was to direct its efforts primarily toward the improvement of methods and procedures. However, in many areas the effect of conversion to electronic data processing has caused a substantial change, both in the content of numerous jobs and in the organizational structure required to carry out the new procedures. Consequently, the Section has frequently become involved in planning extensive reorganizations of operating staffs.

Projects completed during the year include preliminary studies of work processes affecting the timeliness of DBS publications and development of a system of recording and reporting timeliness data; feasibility study of possible automation of the semi-annual crops and livestock survey, and other smaller surveys in the Agriculture Division; reorganization plan for the Agriculture Division to achieve better utilization of presently authorized staff; revision of processing routines for personnel documentation to achieve a more efficient use of staff and to provide more reliable input for the departmental system of mechanized personnel records; method and productivity study of document processing in the Central Personnel Records System Division to develop production standards and to forecast staff requirements; method and productivity study of clerical data processing in the Vital Statistics Section and planning of revised procedures made necessary by increased automation of vital statistics records; developing terms of reference for and planning the organizational structure of a DBS Records Management Unit.

One member of the staff was loaned to the Royal Commission on the Status of Women for

two months early in the year, to develop critical path charts covering three different aspects of the overall activities of the Commission. A computer program was also adapted to provide critical dates for significant events. Another member of the staff was loaned to the Personnel Policy Branch of Treasury Board for most of the year to work with an outside management consultant on the development of an interdepartmental personnel information system for use by most departments and agencies in the Public Service. The report on this study was submitted to and accepted by Treasury Board in February 1968.

A substantial number of projects were in process at the end of the fiscal year. These included the planning of a cost recording system which would provide more accurate estimates of the cost of individual statistical projects.

Central Registers Section

The Central Registers Section administers and develops the DBS Central List of Companies and their Establishments, which provides the basic vehicle for standardizing the classification of companies and their sub-division into standard reporting units for individual DBS surveys. During the year the Central List numbering system was applied to all surveys in the Merchandising and Services and the Business Finance Divisions, which had not previously been entered in this record. The Department of Defence Production adopted the Central List numbering system to identify suppliers with whom they do business, and business continued to examine this record as a possibility for establishing a standard "vendor code" system.

Investigation and resolution of inconsistencies in the Central List continued. During the year 475 such problem cases were cleared, including a backlog of some 250 cases requiring attention at the beginning of the year. This work area is now up-to-date. In addition, regular maintenance of the Central List record required 24,000 additions, 9,000 deletions and over 55,000 revisions of existing records due to changes in name, location, activity or establishment breakdown.

At the close of the year, action was initiated to expand the computer tape record to show full company name, location address, industrial classification and unique identification as well as inter-company relationships and identification of each DBS survey covering a respondent or reporting unit. Application of the Standard Geographical Classification to the record was under way. A procedure was also established to allow integration with the

monthly Employment and Payrolls survey for automatic exchange of common data between the two computerized systems.

A paper was prepared outlining the possible use of the Central List as a nucleus for the development of a "Common Employer Numbering System" comprising all businesses in Canada to accommodate the needs of all user government departments. The proposed plan was found generally acceptable by DBS, the Unemployment Insurance Commission, and the Taxation Division of the Department of National Revenue, and a small working committee will elaborate, at the year end, the proposal in terms of the specific needs of user departments to ensure that such a central index would be acceptable in practice.

The co-operative arrangement with the Unemployment Insurance Commission was continued, whereby their local offices collect a Nature of Business Report from all new registrants. This has proven to be the major source of information necessary to keep DBS survey lists up-to-date. It results in the semi-annual publication *New Manufacturing Establishments in Canada*. At year-end, arrangements were completed to forward basic information from the Nature of Business Reports to the Department of Manpower and Immigration in order to keep their lists of employers up-to-date. During the year special tabulations of new businesses in the Atlantic Provinces were prepared for the use of the Atlantic Development Board in an economic study of that area.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including administration, staff organization, staff development, financial control, training and classification, publications distribution and office services such as the addressograph unit, stenographic pools, supplies, mail and messenger services.

Staff Organization

During the year, staffing activities resulted in a 15 per cent increase in staff at the Bureau; 498 new employees were recruited, including 81 statisticians, 6 economists and 26 computer systems analysts. This represented a net increase of 368 employees bringing the total complement of continuing full-time employees to 2,813, as at March 1, 1968. Additionally, 84 persons had been offered employment with the Bureau as a result of open competitions conducted by the Public Service Commission or by the Bureau on work-sharing arrangements.

A total of 739 employees were promoted during the year as a result of the Bureau's appraisal program and of the 250 departmental promotion competitions. Only sixteen appeals were filed against the results of these promotional actions and of these seven were upheld by the Public Service Commission Appeal Boards.

The Health Unit, a branch of the Public Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

Staff Relations and Evaluation

Preparations for collective bargaining proceeded with direct involvement of DBS staff in the preparation of bargaining books for the social science support and economics, sociology and statistics occupation groups, identification of management and confidential exclusions, introduction of grievance procedures and a discipline policy, and training of managerial and supervisory employees in staff relations.

In the field of employee evaluation, the appraisal system introduced for professional staff was extended to cover the technical officers of the Bureau. A new system of employee appraisal has been developed to cover the technical, administrative support, and operational categories. In addition, plans have been developed to introduce a performance review system and, where possible, to integrate appraisal actions with staffing actions, especially with a view to reducing the number of special competitions.

Staff Development and Training

An active basic program has been carried out by this Section covering the three main fields of supervisory and management development, computer training and a variety of skills training. The staff of the Section operated as consultants to line managers in initiating a general survey of training needs and developing the framework of a program to satisfy the needs that were identified.

In the area of supervisory and management training, 68 selected employees were given theoretical and practical training in effective supervisory and management principles and techniques. The training staff co-ordinated and administered the selection and assignment of 34 candidates for specialized courses given by the Public Service Commission, 4 for post-graduate, and 53 for university extension and courses offered by other educational institutions.

The computer training programs were co-ordinated with a view to training management in understanding the benefits and limitations of the computers in their respective fields. Such training as the orientation course in mechanized data processing was administered by the Bureau for 83 of its personnel. Five hundred personnel participated in other computer courses primarily offered to meet the technical requirements of the Bureau.

This Section has also made progress in developing effective courses in the fields of induction and orientation. One hundred and twenty-five personnel are currently at various levels of training in a second language training program. Special training was organized for 20 Foreign Aid students referred to DBS by the External Aid Office. Job analysis and evaluation courses have been conducted in order to increase the proficiency of 104 line officers in job description and position classification. Plans have been finalized for courses in statistics, mathematics and accounting. An employee's handbook is expected to be made available in the coming year.

Staff Classification

An extremely heavy classification program was undertaken during the year under review but a substantial backlog still existed at year-end. Some 612 cases were documented and classified by the classification staff within the limits of the classification authority delegated to the Bureau. In addition, 204 other cases were documented and submitted to the Bureau of Classification Revision during the same period. At the time of the report, there were 102 outstanding cases awaiting action.

Conversion of all positions classified as technical officers was carried out in March 1968. The standard for the socio-economic group is being developed and it is anticipated that conversion will be completed by the end of June 1968. At the present time, preparations are being made for this conversion and conducting an analysis of existing job descriptions on file as well as working with the professional staff in the preparation of suitable and acceptable job descriptions.

Four job description and point rating courses were conducted during the fiscal year and 71 people attended. The Classification Staff along with BCR provided the majority of lecturers and syndicate leaders. The Bureau of Classification Revision will be unable to continue its participation in future courses and a heavier workload will necessarily be imposed on the Classification Staff. These courses are proving very beneficial and a decided improvement in job descriptions is noticeable. Job training was also provided for four apprentice Classification Officers from BCR.

The allocation of administrative officers to branches and divisions of DBS has greatly improved the administrative procedures. It is intended to delegate classification to branches for the administrative support group and to maintain an audit responsibility in the Classification Section. Procedures to introduce this program into operations are being developed and, as an initial step, graduates of the DBS courses are being given rating experience as members of rating committees.

Incentive Awards

During the year, thirty-nine suggestions were received from DBS employees, of which nine were carried forward from the previous year. Twenty-eight of these suggestions were referred for investigation and three were approved for awards. Early in 1968, the DBS Incentive Awards Plan was turned over to Organization and Personnel Services for administrative purposes.

Financial Services

This Section has two main functions which are performed by the Accounts Unit and the Publications Distribution Unit.

The Accounts Unit is concerned with the overall financial operation of the Bureau including the co-ordination of the Program Review and Estimates. The Unit examines and controls expenditures, audits travel claims and commercial accounts, interprets financial regulations and maintains a financial management reporting system. During 1967-68, further improvements were made in the financial management reporting system, and the first steps were taken towards the establishment of a project costing system.

The Publications Distribution Unit is concerned with the sale and distribution of DBS publications and maintains current mailing lists for distribution of publications and subscription statistical reports. During the fiscal year 1,506,513 pieces of mail were dispatched and 25,009 mail orders were received.

The subscription mailing list is currently made up of 191,150 addressograph mailing plates.

Office Services

As of March 31, 1968, Typing and Transcribing Services included a total of six Typing Units, three located in the main DBS building, one in Number 5 Temporary Building to service those divisions of the Socio-Economic Statistics Branch located there, one in Number 8 Building to service the Census Division, and one in the Kent-Albert Building to service the Aviation Statistics Centre. During most of the fiscal year under review all units were operating under a line-count system whereby production is expressed in terms of lines typed (a standard line is defined as 60 strokes). The number of lines (or equivalent) produced in all units during the current fiscal year totalled 8,455,266. Nineteen positions, previously under the control of Typing and Transcribing Services but with incumbents located outside the units, were transferred under divisional control effective April 1, 1967.

During 1967, an extensive study of the method of recording production was undertaken by the Management Services Section which recommended that the line-count system be discontinued. A mechanical system, using the Optical Mark Page Reader, was recommended and introduced in all units by April 1, 1968. This system will produce: (a) acceptable standard unit times for each different category and type of work, (b) operator production data to assess the relative efficiency of each operator and (c) monthly and annual reports of time chargeable to each publication and to other work, by branch, division and section. It is estimated that the new production recording system will effect savings of approximately \$7,000 annually.

The Printing Liaison Services Unit, in addition to maintaining liaison with the Variety and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications. During the 1967-68 fiscal year, this unit processed 14,200 pages of copy for printing.

The Drafting Unit planned, organized and reviewed a total of 2,468 economic charts,

maps and various illustrations in black and white and colour to illustrate statistical data for the use of management and publishing in over 800 DBS publications, and for other departments and agencies of the Government.

In the Forms Design Unit, work continued on the simplification of design, standardization and revision of forms and questionnaires. During the year, the Unit processed 3,633 forms comprising 11,260 pages of new forms, revisions or reprints. In addition, 534 specialty forms and envelopes were processed and 2,442 miscellaneous printing jobs submitted.

In the Addressograph, Mail and Supplies Unit 17,480,786 forms were addressed for the various divisions of the Bureau. In addition, 286,732 plates were embossed, 104,937 corrected and 258,609 deleted. In addition 51,500 pieces of mail were enveloped by hand and 3,545,981 were inserted by machine. The new heat transfer machine was placed in operation November 15, 1967 and at the end of the fiscal year had addressed 1,117,977 forms.

During the year 24,906 bags of mail were deposited with the Post Office and 11,745 were received. In addition to mail for delivery in Canada, 25,736 pieces of registered mail, 22,675 air mail, 1,295 special delivery, 6,849 parcel post and 102,438 foreign mail were dispatched. Also included in mail dispatched were 1,420 bags containing 3,811,462 pieces for the Department of Agriculture. At March 1, 1968, a new sub-mail unit was established at Number 5 Temporary Building to service the requirements of the Socio-Economic Statistics Branch.

The Supplies Unit submitted 1,190 requisitions to the Department of Defence Production for printing, stationery, office machines and equipment for an estimated value of \$808,500; emergency purchases on outside agencies amounted to \$25,314. The supplies inventory as at March 31, 1968 was \$40,462; the annual stock turnover rate, therefore, was 20.1. A shredding machine has been added to our machine inventory and subject-matter divisions are now able to destroy "Confidential Matter" no longer required. During the period under review, work was completed on 38,531 jobs for a total of 1,244,853 Xerox and Banda photocopies, and 17,055 copies made in March 1968 on the new high speed Dennison copy machine installed at Number 5 Temporary Building to service the Socio-Economic Statistics Branch.

DOMINION BUREAU OF STATISTICS SENIOR OFFICERS

Dominion Statistician Walter E. Duffett

Assistant Dominion Statistician (Integration and
Development) S. A. Goldberg

Assistant Dominion Statistician (Administration,
Finance and Personnel) H. L. Allen

Assistant Dominion Statistician (Socio-Economic
Statistics Branch) L. E. Rowebottom

Director General (Operations and Systems Develop-
ment Branch) L. A. Shackleton

Director General (Economic Accounts Branch) E. B. Carty

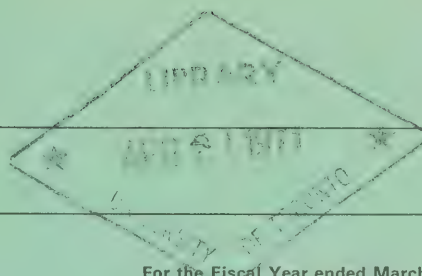
Director General (Financial Statistics Branch) G. A. Wagdin

Director General (Economic Statistics Branch) V. R. Berlinguette

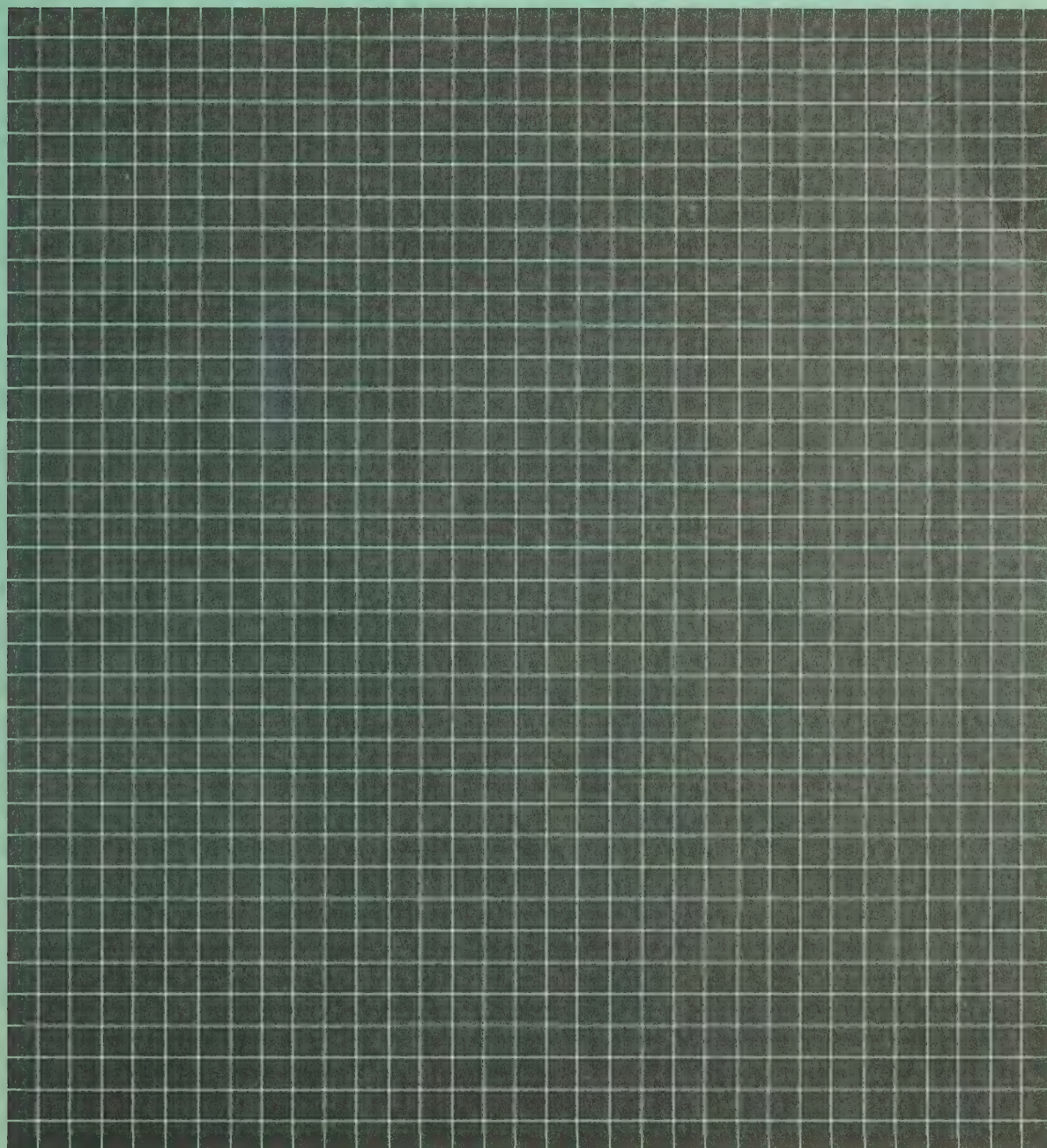


Dominion Bureau of Statistics

Annual Report



For the Fiscal Year ended March 31, 1969



CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1969

March 1970
0001-502

The Queen's Printer, Ottawa

*THE HONOURABLE JEAN-LUC PEPIN, P.C.,
MINISTER OF INDUSTRY, TRADE AND COMMERCE,
OTTAWA, CANADA.*

Sir:

I have the honour to submit the Annual Report of the
Dominion Bureau of Statistics covering the operations and
services rendered during the fiscal year ended March 31, 1969.

Respectfully submitted,

Robert E. Duffett.

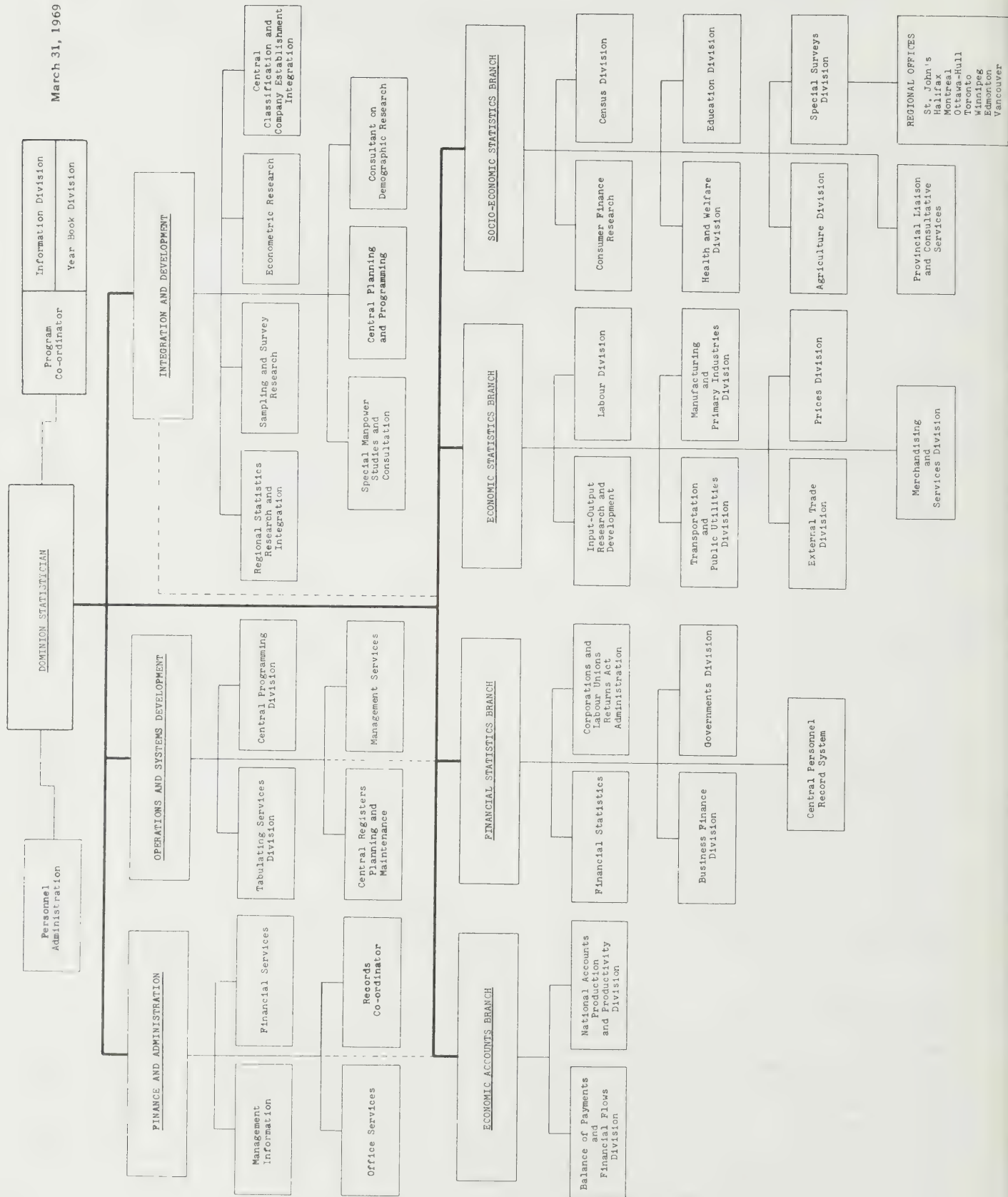
Dominion Statistician.

Ottawa, Canada.
March 1970.

TABLE OF CONTENTS

	<u>Page</u>
Chart of the DBS Organization	6
General Activities	7
Year Book Division	8
Information Division	8
Integration and Development Staffs	
Central Classification and Company-Establishment Integration Staff	11
Sampling and Survey Research Staff	11
Econometric Research Staff	15
Regional Statistics, Research and Integration Staff	15
Special Manpower Studies and Consultation Staff	16
Consultant on Demographic Research	16
Economic Accounts Branch	
Balance of Payments and Financial Flows Division	16
National Accounts, Production and Productivity Division	17
Financial Statistics Branch	
Business Finance Division	18
Corporations and Labour Unions Returns Act Division	20
Central Personnel Record System	22
Governments Division	23
Economic Statistics Branch	
External Trade Division	24
Input-Output Research and Development staff	25
Labour Division	25
Manufacturing and Primary Industries Division	27
Merchandising and Services Division	28
Prices Division	30
Transportation and Public Utilities Division	32
Socio-Economic Statistics Branch	
Agriculture Division	33
Census Division	36
Consumer Finance Research Staff	39
Education Division	40
Health and Welfare Division	43
Provincial Liaison and Consultative Services	47
Special Surveys Division	48
Operations and Systems Development Branch	
Tabulating Services Division	49
Central Programming Division	50
Management Services Section	50
Central Registers Section	50
Administrative Services	
Staff Organization	51
Staff Relations	52
Classification	52
Training and Development	52
Incentive Awards	53
Bilingual Development	53
Records Management	53
Financial Services	53
Office Services	53
Dominion Bureau of Statistics Senior Officers	55

March 31, 1969



GENERAL ACTIVITIES

The Dominion Bureau of Statistics celebrated the 50th anniversary of its foundation on May 24, 1968. Although Canadian censuses have been carried out regularly since 1666-67, when the Intendant of New France, Jean Talon, undertook the first Census of Canada, and following Confederation vital information had been compiled by several government departments, the establishment of a centralized coordinated and integrated statistical organization did not take place until the Statistics Act was passed in 1918. The Act was revised in 1952 and further revisions are now being reviewed.

On July 19, 1968, the Dominion Bureau of Statistics was honoured by the presence of the Prime Minister, Pierre Elliott Trudeau, who unveiled the Canada Population Clock, situated in the lobby of the main DBS building. This clock graphically records the estimated population change and the four basic elements influencing the growth of the nation's total population - births, deaths, immigration and emigration. About every 82 seconds, the clock registers the addition of one person to the population. In mid-March 1969, it recorded a population of 21,000,000 persons in Canada.

Significant progress in the collection of the broad national statistical systems has been made by DBS, reflecting the economic, financial and social growth of the country, but increasing demands continue for additional reliable statistical information, stimulated by the pressing needs of federal, provincial and regional governments as well as those of the business world, royal commissions, parliamentary committees and task forces. Continuous studies are being made to further enlarge and improve the statistical system in order to keep abreast of changing times. In this respect, DBS is devoting important resources to improving its efficiency and productivity in order to meet the new needs as economically and effectively as possible.

The use of modern technology and automated electronic data processing equipment has accelerated to some degree the release of statistical material, while at the same time broadening the scope and range of possible questions for which quantitative answers are required. The addition of a fourth DBS computer in the Operations and Systems Development Branch - a large general purpose IBM 360/65 computer - soon to be installed will

further advance the timeliness of the existing statistical series and other projects still in the planning stages. In addition, the use of outside computers and of expert consultants under contract have proved helpful in meeting the shortage of personnel for special tasks.

In order to promote the most effective utilization of resources and to assist the DBS management in setting priorities, schedule systems and implement programs with current and long-range needs, a planning system, an information system as well as a project and cost accounting system (PRACAS) are in the course of development. In addition, a major long-term project is being developed within DBS and is known as the Canadian Socio-Economic Information Management System (CANSIM). The first stage of this large, fully automated national data bank is now nearly operational and will contain a large number of publishable time series at all levels of aggregation.

Preparations are progressing for a more comprehensive decennial Census of Population, Housing and Agriculture in 1971. Field tests have been carried out in both urban and rural areas. A geographically referenced data storage and retrieval system is being designed and it is hoped will be developed in time to use the 1971 Census and other data. This will make it possible to retrieve specific data on both national and small geographic areas quickly.

Changing social and economic conditions in Canada, with costly education and welfare, income maintenance and area development programs are demanding more and more statistical information. To meet these needs, and as resources permit, DBS is endeavouring to extend its coverage in all fields, particularly in prices, education, the service industries and in construction.

In order to keep attuned to recent developments in technology, a career development program is underway within the Bureau. In addition to language courses, training in mathematics, computer science and management are now available.

As at March 31, 1969, the staff numbered 2,868 persons, housed in four widely-separated buildings in Ottawa, and in the eight regional offices across Canada. Plans are underway for a new DBS building to be completed in time for the 1971 Census of Canada to accommodate all the DBS staff stationed in Ottawa.

Among staff changes during the year was the loss through retirement of Mr. C. Douglas Blyth, Director General of the Economic Accounts Branch and Mr. M.J. Mahoney, Director of Company-Establishment Integration, and Mr. J.L. Forsyth, former Acting Director of the Census Division. Mr. Frank Denton, Director of Econometric Research left to join the staff of McMaster University. Their counsel and contribution to the efficient operation of the Bureau were greatly appreciated. At the same time DBS welcomed the appointment of Mr. E.B.

Carty, the new Director General of the Economic Accounts Branch; Dr. Paul Rubinyi, Director of Programming and Planning and Dr. T.J. Vander Noot, Associate Director General of the Operations and Systems Development Branch. In a period of continued pressure, the staff of DBS has responded with splendid co-operation and effort. The maintenance and growth of a quality statistical program has been possible only through the dedicated and willing efforts of the DBS staff at all levels.

YEAR BOOK DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official compendia of information on the Canadian economy, the *Canada Year Book* and the handbook *Canada*, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study. Both the English and French editions of the *Canada Year Book* for 1968 were released in November 1968, and those of the handbook *Canada 1968* were released in January 1969. In addition, work on the Spanish edition of *Canada One Hundred 1867-1967* (*Canada Un Siècle 1867-1967*) neared completion and its publication is planned for 1969.

A special inquiries unit, focused around the *Canada Year Book* coverage of authoritative Canadian data, supplies regular series of statistics for the United Nations Statistical Monthly Bulletins, the United Nations Statistical Yearbook and for the International Labour Office. In addition, it provides up-to-date revisions of Canadian statistical and textual material for many standard national

and international reference works and dispenses current and historical data in response to multi-subject inquiries received by the Bureau.

The library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff, research workers and the general public. It also has an extensive collection of statistical publications. Because of the greatly increased requirements for new publications and increased funds allowed for purchase, a thorough review of the Library and of its organization is planned for 1969. The purpose of this review is to provide the guidelines for whatever increases and improvements are required in existing services, and for the creation of new services where necessary. It is expected that, in due course, the Library will augment its present services with indexing, descriptive abstracting, and establishment of branch and satellite libraries in the subject divisions. Also under consideration is the application of punched card systems to certain basic library operational records with a view eventually to adopting computer operations.

INFORMATION DIVISION

Growing public awareness of the value and usefulness of statistical information was both a cause and an effect of the division's promotional activities in 1968-69. Advertising, publicity and information campaigns helped to create a wider interest in the uses

of statistics and public response to them increased demands on the Division's service. This general trend was reflected in each of the four operating sections of the division--Publicity Services, Statistics Use Development, Publications Section and Inquiries.

The *DBS Daily Bulletin* and its sister publication, *DBS Weekly*, continued to gain readership during the year. Originally produced as a service for Canadian news media, the two bulletins have since found a much wider audience. Of the *Daily Bulletin's* 1,950 recipients today, the great majority are users of statistics rather than the news media. Similarly, users of statistics represent by far the greatest part of the *DBS Weekly's* circulation of 4,900 copies which go to individuals, government officials, publications' editors and business executives across Canada.

The value of the *DBS Daily Bulletin* as an information medium for press, radio and television has been underlined by a Canadian news agency, which estimates that some 50 news reports a week, emanating from its Ottawa bureau, are based on DBS information, provided principally by the *DBS Daily*. The same survey showed that many recipients of the *Bulletin* use information directly from it in practical applications rather than waiting for the statistical report itself to arrive.

The Fiftieth Anniversary of the establishment of DBS occurred in 1968 and a limited publicity campaign was undertaken to make the event known, especially to users of DBS statistics and suppliers of information. This publicity took the form of posters, anniversary stickers on outgoing mail and use of post office cancellation dies. Also, the Bureau constructed the Canada Population Clock which was installed in the lobby of the main foyer of the DBS building. The clock, which was inaugurated on July 19, 1968 by the Prime Minister in a public ceremony, shows the estimated growth of the population of Canada on the basis of the DBS quarterly population estimates. It also simulates the rate of change in each of the main population determinants - births, deaths, immigration and emigration.

The Publicity Services Section continued its developing program to establish a closer bond between respondents to DBS questionnaires and the statistical branches and divisions charged with responsibility in the relevant field. As new DBS surveys were approved, the Information Division worked closely with the subject divisions involved to ensure rapport with the respondents who would be asked to supply information needed. Modern publicity techniques were employed in these projects, with good success. Initial response in many cases was above expectations and much higher than levels achieved previously.

In the initiation of the survey of census of mechanical contractors, identification of 85 per cent of the industry's gross volume was achieved. The cattle on feed survey for

Alberta was inaugurated with publicity support and brought a 35 per cent response, when 25 per cent has been considered a good target percentage. The Livestock Section of the Agriculture Division reports that publicity techniques have almost doubled response rates compared to those areas where they have not been employed. In the various census tests held by the Census Division, direct mail and other publicity support has been credited with playing a significant role in achieving a voluntary return of 51 to 85 per cent of census questionnaires.

Census tests were conducted in Toronto and four agricultural areas across Canada during 1968. For these, the Information Division developed publicity support along lines established during the London test census the previous year. Self-enumeration methods were being used with a view to applying them nationally in the 1971 decennial census.

In the 1968 tests, direct mail promotion was augmented by news releases, pamphlets, posters and personal contact with local radio, television and newspaper staffs.

As a further stage in the development of communications between the Bureau, its suppliers of statistical information and the users of statistics, the Information Division installed and staffed special displays at meetings of business and professional associations where special, reciprocal interest appeared to exist. Exhibits were developed during the 1968-69 fiscal year for presentation at meetings of the following organizations: the Canadian Food Processors Association in Montreal; the Canadian Plastics Association in Ottawa; the Canadian Learned Societies in Calgary; the Canadian Manufacturers' Association Conference in Toronto; the Canadian Library Association in St. John's, Newfoundland; and the Canadian Hospitals Association in Ottawa. The latter two meetings were not scheduled to be held until after the beginning of the 1969-70 fiscal year, but material for the exhibits was planned and prepared in the year now under review.

The Division also co-operated with other branches of DBS in three seminars held under the sponsorship of the Canadian Manufacturers' Association. The seminars, given the working title of "Statistics for Manufacturers" were held in Toronto on September 18, 1968; Moncton, N.B. on March 12, 1969; and St. John's, Newfoundland on March 14, 1969.

The Statistics Use Development Section operates in three basic areas: research into who uses DBS information and how they use it; development and extension of the uses of information, particularly by business, through

industrial visits, seminars and courses, so that the body of statistics produced by the Bureau can be given wider application; and elaboration of the methods of reaching users so that DBS information may be made more accessible such as through manuals or information booklets.

During the year under review, an officer of this Section was established in the Toronto region. A Statistics Use Development Officer has also been active in the Montreal region since 1967.

During the year, the Section completed a survey of DBS replies by mail to inquiries to DBS which disclosed that nearly 42 per cent of these came from business, 27 per cent from governments or their agencies, 21 per cent from professors, students and researchers in schools and universities, and 9 per cent from miscellaneous users. It also showed that the largest business use of DBS information was for marketing (43 per cent) followed by share of market and similar comparisons (16 per cent) and business location (10 per cent). Other important business uses were for product research, investment, internal operating ratios and collective bargaining. The users came from every industrial classification and geographical region of Canada and from businesses large and small.

The section encourages increased use of statistics through seminars to trade associations and businesses. During the year it also launched an industry-by-industry group scheme of contact in Montreal and Toronto, to provide business with assistance in putting DBS information to use. The response from businessmen has been good.

Statistics Use Development personnel also carried out other kinds of direct business liaison work. Many business statistical information problems are referred by the Section direct to a DBS subject division for additional information or for special compilation. These referrals have led to improved uses of available information and as the responsibility of the subject division involved, development of

changes in DBS reporting and surveys. The Section also works closely with DBS divisions in searching out business response to surveys and in assisting divisions by developing an awareness of business informational needs. While the Section places major emphasis on its role with the business community, it also gives substantial assistance to government agencies and other departments, particularly at the regional level.

The Inquiries Section had another active year, handling some 1,600 inquiries a month by mail, telephone and personal visits. The figures themselves do not reveal the whole extent of the workload nor the value of the service rendered. Some of the more complex inquiries required many man-hours of research as well as the preparation of special tabulations to meet the inquirer's specific needs. Data were assembled from a variety of sources, mostly within DBS, but frequently from other governmental and private sources. Most inquiries originated in Canada, but a growing number were received from foreign countries.

The development of a new advertising campaign by the Information Division, urging individuals and business firms to make more use of statistical information available from DBS, produced a good response. Advertisements in the "Dear DBS" series carried coupons to facilitate requests for information. Returns from this source alone amounted to more than 3,000 and placed a further workload on the Inquiries Section.

The Section compiled and published a new 356-page catalogue of DBS publications, the first revised edition of the catalogue since 1964. The 1968 catalogue contained, for the first time, a section on data files and the availability of unpublished information.

The Inquiries Section also published a 20-page special catalogue during the year, listing all publications based on data from the 1966 Census of Merchandising and Services. It was similar to that produced in 1967-68, dealing with the Censuses of Population and Agriculture.

INTEGRATION AND DEVELOPMENT STAFFS

The following professional staffs are attached to the office of the Assistant Dominion Statistician for Integration and Development: Central Classification and Company-Establishment Integration; Sampling and Survey Research; Econometric Research; Regional Sta-

tistics, Research and Development; Special Manpower Studies and Consultation; Consultant on Demographic Research. A review of the activities of these staffs during the fiscal year follows:

Central Classification and Company-Establishment Integration Staff

The Company-Establishment Integration Staff and the Central Classification Staff were combined during the year.

Work continued on the development of a Canadian Classification and Dictionary of Occupations. It is a joint venture between DBS and the Department of Manpower and Immigration. The Department of Manpower and Immigration continued its work on occupational definitions while the staff in DBS concerned itself with classifying occupations and developing indexes. The structure of the new classification, including definitions for major, minor and unit groups, was settled in the fall of 1968. Industrial definitions were developed for use in association with the occupational definitions. These industrial definitions are a condensation of the classes shown in the 1960 edition of the Standard Industrial Classification Manual. To relate the 1961 Census Occupational Classification to the new occupational classification, it was necessary to fit the former occupational terms into the new structure and this project is about half finished. Research is also continuing toward expanding the index of occupational terms and such sources as the Labour Force Survey, Job Vacancy Survey, Applications for Unemployment Insurance, a sample of 1,000 enumeration areas from the 1961 Census and the 1971 Census Test material are being examined. An interim manual will be prepared for testing in the Census Test of October 1969 and the final classification manual will be ready for the 1971 Census.

During the year, a committee of DBS officers began a review of the Standard Commodity Classification. About one-half of the classes have been reviewed to date. Work has also continued during the year on the Standard Geographical Classification, the Standard Industrial Classification and on classification research.

The prime objective of the Company-Establishment Integration staff is to co-ordinate the financial and production statistical segments of the Bureau into a comprehensive and integrated set of statistics that will allow a more flexible response to surveys within a more consistent and detailed framework than now exists. The first stage of the study is with the large individual corporation where the firm is contacted, consulted and co-operation requested. Six of the largest and most complex firms, whose operations reflect a wide range of the economic and financial statistics collected in the Bureau, have been selected for detailed study and investigations

are currently in process. The results of this study should lay the foundation for the research required for the balance of the larger corporations. This study has been influenced by the increasing development in the use of electronic data processing equipment by both industry and government.

The second stage of this approach is the research into the utilization of existing administrative records such as the corporate income tax return for the small and medium-sized corporation which is available under the Corporations and Labour Unions Returns Act. The increase over the years in the number of tax provisions calls for more detailed information and has greatly expanded the statistical productivity of the tax return. However, because of conceptual differences, much of the data from the tax returns are found to be at odds with the data collected by conventional means in the Bureau and much challenging research is required in this area before a full reconciliation and integration can be accomplished.

Two additional research projects began during the year. One was a comparison of financial statistics on wholesalers (based on companies) with statistics from the annual census of wholesalers (based on establishments). The other was aimed at incorporating the full universe of companies reporting financial data into the Central Register of Companies and Establishments. Research also continued on the effect on statistics by industry of using the company or the establishment as the reporting unit. Employment data was used in the analysis.

Sampling and Survey Research Staff

The prime responsibility of the staff is to work on the methodology of DBS surveys, design new surveys or redesign existing ones, and advise and participate in their implementation. The objective of such work is to achieve through the application of sampling, improved survey methods or automation, one or more of the following: increase the reliability of statistics; improve their timeliness; and/or reduce the cost of compiling them. Most of the work of the staff can, therefore, be grouped around the projects of the different subject-matter divisions.

Census Division Projects. - Further progress was made during the year on the projects undertaken to measure the coverage errors of the 1966 Census of Population. A report was produced on the coverage errors associated with the Agriculture Census and this was published by the Census Division.

The survey designed to evaluate the coverage errors associated with the Census data collected during the London mail-out/mail-back Test Census was completed and two reports were published. A third is pending and will be completed during 1969.

Analytical studies were designed during the year to make additional use of the data collected for evaluation purposes. These studies were concerned with problems such as inter-and intra-provincial migration, with the economic characteristics of persons not enumerated in the Census.

The staff also initiated two feasibility projects to be undertaken during 1969 in preparation for the 1971 Census Evaluation Program. It is hoped that one of these projects will make a substantial contribution towards the improvement of the timeliness of coverage evaluation data while the other is designed to test the feasibility of new methods of evaluation.

A report was written describing the weighting procedure for the sampled data collected in the London Census Test. A motivational study was carried out to investigate the effect of publicity and the reasons which motivate people to complete census questionnaires and a report has been published.

The problem of whether to sample or to take a complete coverage was extensively studied with respect to the 1971 Census. A detailed report explaining the pros and cons of each potential method as well as providing rough estimates of root mean square errors was prepared in collaboration with other Bureau personnel. The mean square error compared with the cost of sampling versus complete coverage was studied utilizing cost values estimated from 1961 Census and recent test censuses.

Quality control plans were devised for the listing and editing operations in two Census Tests (for London in 1967 and for Toronto in 1968). The quality control of the census of population has been extended for the 1969 Trial Census and plans have been devised for the first three of the following:

- (1) quality control of printing of census questionnaires;
- (2) quality control of enumeration;
- (3) quality control of coding;
- (4) quality control of document readers and other associated operations.

From the results of the above procedures in the 1969 Trial Census, and the results of a Work Measurement Program and the Computer Diary System for the 1969 Trial Census pre-

pared by the Census Division, detailed analysis will be performed on costs and corresponding qualities that can be achieved. Then adequate quality control plans will be devised within the budget for the 1971 Census of Population.

Labour Force Survey. - The monthly variance estimation program pertaining to the Labour Force Survey was extended to permit variance estimates of over 30 additional characteristics in any particular month for surveys taken in conjunction with the Labour Force Survey.

Tables of monthly estimates, standard deviations, and coefficients of variation are produced for over 40 characteristics for each province and region, and for Canada. These tables include descriptive titles of the characteristics so that the computer output of the titles and pertinent figures may be reproduced directly without any manual copying. Similar tables are now produced for month-to-month difference and year-to-year differences as well as weighted averages for any number of consecutive months up to a full year. These tables are automatically sent to the Special Surveys Division and are available upon request. A by-product of the above is that of a study of unusual observations for editing purposes. Another by-product is that it provides raw material for a study of the deterioration of the sample design over time.

Agriculture Division. During the year under review the staff designed a number of surveys, in collaboration with the Agriculture Division, which were carried out by that Division. In connection with the cattle surveys in Alberta, semi-annual surveys (one in January and one in July) on a new probability basis were initiated in January 1968. The sampling design is based on stratification by area and size of farms. It is designed to facilitate the estimation of sampling errors. Response in these surveys, estimated by areas, varied from 30 per cent to 47 per cent. A field survey of the non-responding units will be carried out in August 1969 in order to estimate the impact on reliability of the non-response.

A design similar to that described above has been utilized for the hogs survey in Ontario. In addition, advice on sampling design and estimation procedures has been given on field surveys for various fruit and forage crops carried out in the provinces of Ontario, British Columbia and Alberta.

Domestic Travel Survey. - In September 1968, Treasury Board had approved in principle a comprehensive Domestic Travel Survey for 1970-71 which had been proposed at the 1966 Federal Provincial Tourist Conference and had received unanimous endorsement at that time. The objectives of the survey are to identify

the patterns and to quantify the values of inter- and intra-provincial travel, in such locality depth as is practicable.

DBS recognized the need for more adequate statistics in this field and endorsed the idea of a Domestic Travel Survey but no space survey capacity was available. It was therefore decided that the field work should be carried out by a private firm under contract to, and under the supervision of, the Dominion Bureau of Statistics, and there should be a Domestic Travel Team set up in DBS to be financed originally by the Office of Tourism. The Domestic Travel Team would be responsible for designing a pilot study in 1969 costing approximately \$50,000, and a Domestic Travel Survey costing approximately \$1,000,000 dollars. This team would also be involved in supervising the implementation of these surveys by a private firm. By the end of 1968, a new section called the Domestic Travel Section had been approved for the Sampling and Survey Research Staff. Recruiting of two statisticians for this project was underway and the section began operating on January 1, 1969.

Merchandising and Services Division Projects. - The new design of the Retail Sales Survey, referred to in previous annual reports, has been developed for implementation in the latter months of 1969 in conjunction with the Merchandising and Services Division. This new design had been tested in a pilot study carried out in Prince Edward Island. The survey will embody two different samples: the first, a sample drawn from a master list that has been created and is to be updated on a continuing basis from lists presently available within the Bureau; the second, a supplementary set of locations listed in a sample of areas drawn from across Canada that will estimate the relevant characteristics of location either missing from the master list or recently come into existence. The survey will be orientated to systematized computer processing to an optimum degree and critical path methods have and will be used to keep the survey on schedule. The system will be designed to be flexible enough to extend to the wholesale and service sectors of the Merchandising Division and other facets of retail trade area, e.g., the estimation of credit statistics. In fact, preliminary discussions for a redesigned credit survey have already taken place.

For the 1969 Test Census of the Census of Merchandising, a form was designed for drop-off by the Census enumerator and mail-back by the contacted location. Although this format may not be used in the 1971 Census, it is hoped that the data gathered from the test will provide a basis for the design of the procedures for the 1971 Census. In addition, regular discussion and work sessions have been initi-

ated with the subject-matter division to plan and control the 1971 Census of Merchandising.

The Sampling and Survey Research Staff were responsible for the design and selection of the sample for the 1968 Retail Commodity Sales Survey using the 1966 Census of Merchandising as the sampling frame, for appropriate program specifications and volume tests, and also for the design of a network diagram for the control of the project up to the mailing in February 1969.

The staff designed the 1968 Annual Sales Estimate for Wholesale Merchants Proper. The purpose is to provide annual statistics for Wholesale Merchants proper based on a sample rather than on a census in order to reduce the amount of work. The updated 1966 Census list was used as a frame for the selection of a stratified sample.

External Trade Division Projects. - The IBM 1287 Document Reader was tested to determine its reading capability with respect to the direct transferral of handwritten data on code sheets to magnetic tapes in the computer system. Comparisons were made with the present system, which incorporates coding information on code sheets from which cards are first key-punched and then read into the computer and put onto magnetic tape. Many detailed comparisons on accuracy, timeliness and costs were made. A report entitled "IBM 1287 Document Reader Test" issued in November 1968 gives an account of the methodology used, the results and the recommendations. The test showed that this document reader, at the stage of development when the test was carried out, was not suitable for the input of handwritten characters to a computer system.

The sampling of Small Value Import Entries from the United States (where the total of imports shown on an entry is less than \$1,500) was devised and tested by the External Trade Division over a period of several months and then implemented in January 1969. Samples of small value American entries are selected independently from each of nine broad commodity groups, with a sample fraction of one in ten. Sampling fractions will be reviewed to ensure accuracy, based on data currently gathered on the reliability of the resulting estimates.

This sampling reduced the staff resources used in processing import statistics in the External Trade Division by a significant margin while making available some positions for improved quality control. There should also be a corresponding reduction in the number of keypunched cards and keypunch operator man-years associated with the processing of the External Trade Division's import statistics.

Labour Division Projects. - Preliminary specifications were written for three sub-systems which together make up an advanced package for the mail-out, follow-up, edit, imputation, and tabulation of the Employment and Payrolls Survey -- large firms (ES 1). Further refinement of these specifications in collaboration with the Central Programming Division and the Labour Division staff was going on prior to programming and implementations planned for 1969-70.

Work continued on the new system of the Employment and Payrolls Survey -- Small Firms (ES 2), which became operational during the year. However, a proposal was made by Sampling and Survey Research Staff, to combine the collection of data on employment and current job vacancies for the small firm sector. According to this proposal, which was accepted in principle, the collection vehicle would be the Job Vacancy Survey (JVS). The processing of employment statistics would not be done under the JVS system, however, for technical reasons, and the staff has undertaken to provide specifications for a new ES 2 system to be implemented in 1969-70. Significant improvements with respect to the quality and cost are anticipated.

The Job Vacancy Survey, a twice monthly survey of current job vacancies became operational, at least for the large-firm manufacturing sector and was expected to achieve the same status in the remaining sectors during the first half of 1969-70. Research on methods of increasing the statistical efficiency of the complex design used in the JVS, delayed to some extent by pressure to become operational, will continue.

Manufacturing and Primary Industries Division Projects. - Testing of the developing computer systems for the Current Shipments, Inventories and Orders Survey and the preparation of historical data for keypunching continued through the year. Problems with programming the computer systems delayed their scheduled introduction on an operational basis this year. Some preliminary work was done in connection with the contribution to be made by the staff to a project for the complete automation of the processing of the Censuses of Manufactures, Mining and Logging.

Transportation and Public Utilities Division Projects. - Detailed plans were prepared for the initiation of two new surveys in the transportation area. The first of these is really a new version of the discontinued Motor Transport Traffic Survey and involves the collection, by mail, of inventory type information from a sample of truck registrations drawn from provincial motor vehicle registration files. Owing to the non-standard nature

of provincial registration systems this survey involves some difficult technical problems connected with the unduplication of files and the reduction of vehicle types to a common classification system.

The second survey, for which a pilot survey is planned for 1969-70, involves a multi-stage sampling process with individual shipping documents (waybills or bills of lading) as the ultimate sampling unit and statistics on commodity movements by origin and destination as the end product. The universe consists of shipping documents for all shipment carried by for-hire carriers in one calendar year.

Central List of Business Units. - Some basic conceptual work on the structure and uses of, and maintenance systems for, an extended Central List was carried out and incorporated in a paper which has provided a starting point for the extension project to be undertaken beginning in 1969-70. Many of the concepts and techniques were worked out in the development of the Job Vacancy Survey master file systems.

Data Processing Operations Division - Quality Control of Key punching and Keytaping. There are three surveys (Imports, Employment and Payrolls Surveys, ES 1 and ES 2) which are currently being keypunched under quality control sample verification plans instead of 100% verification. Other surveys are being investigated for transferral to sample verification. Investigations have commenced on quality control of string keypunching, quality control of keytaping and on the design of an overall quality control system for use in Data Processing Operations Division.

Geocoding Project. - This project has been described in previous annual reports. The programs used to create and maintain area master files for urban areas, having been tested and run on the Ottawa-Hull area files, were placed on an operational status. The programs are currently operating to create and maintain files for Vancouver and Calgary. During the year agreement was reached with several municipalities to participate in the work of preparing area maps and coding streets for preparation of area master files. Members of the Geography Section, Census Division, held training sessions for clerks and supervisors of participating municipalities.

The first Geocoding Bulletin was published. The second bulletin is being edited, and will be published in September 1969. The forthcoming bulletin is designed to answer a number of questions posed by potential users of the system on the mechanics of the system itself and the way the system will operate to their benefit.

The procedures and processes for handling rural geocoding have been chosen and coding for test areas has been completed. The important program to store and retrieve data is currently being tested. These programs were the basis of demonstration seminars held for staff and management personnel of the Bureau on the system design and use. Contracts were let for a generalized street map plotting program and for address conversion programs.

In preparation for the 1969 Trial Census in St. Catharines and Sherbrooke, the staff associated with the geocoding project is embarked on a speeded-up endeavour to geocode St. Catharines in advance of the test, so that a system simulation of the 1971 Census can be run and checked out in 1969. In this way, the interaction of geocoding with the operations of the Census Division may be evaluated and timed.

Studies were carried out on rural geocoding concepts and procedures; storage estimates and requirements for 1971 Census Data; handling of addresses and preparation of addresses and preparation of address registers from the 1971 Census; and of retrieval by means of graphical description of query areas. A report was written on the London geocoding test run in 1967-68.

Other projects and assignments. - The first number of the Quarterly Bulletin of the Sampling and Survey Research Staff, designed to acquaint interested non-technical persons with its activities, was issued in April 1969. This Bulletin reports projects underway or successfully completed. Brief accounts of theoretical researches now in progress will be reported in future issues.

During the year under review, forty-one advanced lectures were given to selected professionals and forty-eight introductory lectures were given to subject-matter statisticians including members from the Agriculture, Education, Vital Statistics and Census Divisions.

As in previous years, the staff provided significant consulting services with respect to survey design and methodology to a large number of federal and provincial departments.

Econometric Research Staff

During the fiscal year considerable emphasis was placed on the use of econometric and related techniques to improve the timeliness and/or the quality of various series produced by DBS. In particular, members of the Econometric Research Staff served on task forces which were formed to improve the time-

liness of the quarterly national accounts and to explore the possibilities of improving the quality of construction price indexes.

The development of a non-linear regression program was initiated and earlier developmental work was continued on the application of econometric techniques to the estimation of commodity by commodity input-output tables and the evaluation of DBS capital stock estimates. In order to expedite the evaluation of the capital stock estimates, staff members also assisted members of the National Wealth and Capital Stock Section of the Business Finance Division with extending the estimates of fixed capital flows and stocks in manufacturing beyond 1969; a by-product of this combined effort was the completion of the extension of these estimates early in the fiscal year.

Considerable progress was made on two analytical studies started earlier, hospital costs in Ontario and the labour force participation rate of married women, using both census and survey data.

Staff members continued to devote much time in offering consultation services to personnel inside and outside the Bureau and a major portion of the time of one member of the staff was devoted to staff training.

Regional Statistics, Research and Intergration Staff

A major project, designed to develop the methodology of producing annual estimates of population for counties and census divisions, utilizing data from a variety of sources has been completed and the report describing the methodology developed and estimates for 1967 has been published.

Another project aimed at developing indicators of growth patterns in manufacturing employment by counties and census divisions for the periods 1949-1959 and 1961-1965 has also been completed. The report that shows indices of regional shifts in manufacturing employment and the methodology applied is in print.

The staff worked out proposals for a new set of census divisions in Saskatchewan. A report containing the research results and the new boundaries was submitted as a DBS proposal to the Province of Saskatchewan.

Work has been started to develop annual estimates of labour force by counties and census divisions. The staff provided assistance to the Consumer Finance Research Staff to develop aggregate money income estimates

for counties and census divisions and also participated in the project of producing unemployment estimates for sub-provincial areas.

Special Manpower Studies and Consultation Staff

The research program of the staff continued in 1968-69 with studies on various aspects of the Canadian labour market. These included the following *Special Labour Force Studies*: Labour Force Characteristics of Post-war Immigrants and Native-born Canadians: 1956-67; the Educational Attainment in Canada: Some Regional and Social Aspects; Women Who Work: Part II; Some Methods of Analysing Cross-Classified Labour Force Participation Rates (not yet published); and the following *1961 Census Monograph Studies*: The Female Worker in Canada; Geographic Composition of the Canadian Labour Force (not yet published); and Working Life Estimates of Canadian Males (not yet published).

Two studies in the course of preparation are concerned with the utilisation of manpower in Canada. The first will identify the sources of under-utilisation as measured against a reasonable goal; the second will attempt to explain variation in labour supply in response to fluctuations in the economic climate, *i.e.*, labour demand.

Developmental research by the staff, during the year 1968-69, was again primarily concerned with the continuing development of the concepts employed in, and operational procedures used in, the new Job Vacancy Survey. The staff was also concerned with the finalisation of concepts to be used in the 1971 Census and the planning of the subsequent program of tabulation and analysis.

Consultant on Demographic Research

During the year under review, work completed included: a special chapter on population movement written for the *1969 Canada Year Book*; research on the delineation of Census Metropolitan Areas for the 1971 Census Metropolitan Area Committee; a special 1961 census bulletin on migration to Census Metropolitan Areas; revisions of parts of 1961 census monograph on internal migration; and a check and revision of the French translation of the 1961 census monograph on urbanization. In addition, the Consultant served on several Census Division Committees concerned with the planning of the 1971 Census, and chaired inter-divisional committees concerned with projections and research on vital statistics, and acted as Assistant Director of Research in the Census Division.

ECONOMIC ACCOUNTS BRANCH

This Branch, in its general responsibilities, is concerned with a wide range of economic statistics which include the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below is carried out in the Balance of Payments and Financial Flows Division and the National Accounts, Production and Productivity Division. The scope of information covered by the Branch extends over the whole ambit of the organized output of the Dominion Bureau of Statistics and beyond, providing a set of macro-economic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

Balance of Payments and Financial Flows Division

The Balance of Payments and Financial Flows Division is concerned with the construction, analysis and publication of statis-

tics and reports related to two important sets of economic and financial relationships. The first of these involves estimates of the balance of payments covering economic and financial transactions between Canada and other countries, estimates of Canada's international investment position and measuring and exploring the country's external assets and liabilities. The second set of relationships is embodied in a comprehensive set of financial flow accounts, setting out intersectoral claims and revealing the process by which real and financial resources are transferred within the Canadian economy.

The current publication program of the Division includes quarterly and annual reports on the balance of payments; monthly reports on sales and purchases of securities between Canada and other countries; and monthly and annual reports covering travel between Canada and other countries. It was not possible to produce an annual report on the balance of payments during 1968 but the principal series covered in the annual report were published as they became available in the regular quarterly

reports. At the end of the year the first report on the financial flow accounts, a further development of the general system of national accounts, was in the press. This report contains quarterly and annual series for the years 1962 through 1967.

Unsettled conditions in the international exchange and money markets and balance of payments difficulties in some of the principal countries of the world were again characteristic of much of the year. Balance of payments statistics continue to attract close attention from the public and from officials in Canada and abroad. A rising balance of unidentified transactions raised considerable concern, and efforts of the staff were directed to the exploration and reduction of this problem. Further progress was also made in the joint efforts of balance of payments statisticians in the United States and Canada to explain apparent inconsistencies in the data collected in the two countries.

In addition to the close co-operation with the Office of Business Economics of the United States Department of Commerce, staff participated, on the invitation of the International Monetary Fund, in a meeting of balance of payments technicians held in Paris under the auspices of the Fund. Canadian experts also participated in a meeting called by the Committee for Invisible Transactions of the Organization for Economic Co-operation and Development to discuss the program of work on capital markets, as well as meetings of the Ad Hoc Group of Financial Statisticians, which is chaired by a member of the Branch. Additional work was involved in the preparation of technical material for OECD statistical expert groups in the fields of international aid and tourism.

National Accounts, Production and Productivity Division

The National Accounts, Production and Productivity Division co-ordinates, processes and analyses information from a variety of sources. This encompasses responsibility for the income and expenditure accounts, the work on gross domestic product by industry in both current and constant prices, (the latter includes the index of industrial production), and the development of measures relating to the aggregate productivity performance of the Canadian economy and its major sectors. The Division is also responsible for the production of the *Canadian Statistical Review* and the concomitant production of monthly articles for this publication as well as further development and research of seasonally adjusted data.

Regular publications of the division include the following: quarterly and annual - *Income and Expenditure Accounts*; the monthly publication of the *Indexes of Industrial Production* and the *Quarterly Indexes of Real Domestic Product* as well as the annual publication of the *Survey of Production* which deals with the output of commodity producing industries on a provincial basis. In the area of productivity, indexes of output per person employed and per man-hour are published annually for the commercial economy and its major components. The available detail now includes separate measures for the commercial goods-and service-producing industries as a whole. At the individual industry level, the study on the pulp and paper industry was updated.

In addition to the provision of day-to-day assistance to many businesses, academic and government users, considerable material was furnished to such government agencies as the Department of Finance, the Economic Council of Canada, the Department of Industry, Trade and Commerce, and the Bank of Canada for the preparation of their reports and for their needs in fulfilling their obligations as economic advisers to the government.

Of special interest during the past fiscal year has been the work to rebase the industry of origin real domestic product system (including the index of industrial production) to a 1961 weight base and to incorporate revisions to the Standard Industrial Classification which was completed and published. The quarterly real domestic product data have also been rounded out this year to regularly include the agriculture industry.

In collaboration with the Economic Council of Canada, further development work on the improvement of a time series data bank was carried on during the past fiscal year. The existing data bank was used intensively by other federal government departments and agencies and the use of such a data bank will be made available to the public at large in the new fiscal year.

The Division also continued to participate actively in the international deliberations and conferences which are taking place in connection with the proposed revision of the United Nations International System of Standard National Accounts. In this connection, a member of the staff attended a conference of a working group of the Conference of European Statisticians in Geneva.

FINANCIAL STATISTICS BRANCH

The Divisions of the Financial Statistics Branch produce a wide range of financial statistics on business and governments. During the past few years there has been a particularly lively interest in how well the financial markets are succeeding in bringing borrowers and lenders together, and how the existing statistical series and the new series being developed are helping to measure their role. Some important work is also being done with respect to the nature and extent of services rendered by governments and the intergovernmental flow of funds. The Branch plays a leading role in seeing that the financial series produced within the Bureau are consistently defined, and that the needs of the users are met. Important non-financial series, such as capital expenditures and scientific expenditures, are also produced within the Branch.

Business Finance Division

The Business Finance Division is responsible for the development, collection, compilation, analysis and publication of data on a variety of subjects, such as profits, assets and liabilities, capital expenditure intentions and realizations, construction activity, statistics of the construction industry, housing, building permits, scientific research and development, commercial failures and bank debits. The Division also is responsible for the development of estimates of financial flows for the corporate sector of the economy, as well as estimates of flows and stocks of capital goods in the economy.

The financial Institutions Section was formed in 1967 to deal specifically with the task of developing surveys of financial institutions. During 1968-69, the Section continued the collection and publication of quarterly balance sheet data of trust companies, mortgage loan companies, sales finance and consumer loan companies, investment dealers, mutual and closed-end investment funds, and fire and casualty insurance companies. In the third quarter of 1968, data for credit unions were added to the regular quarterly publication *Business Financial Statistics*. This publication was issued in bilingual format beginning with the fourth quarter of 1968.

A new annual publication *Credit Union Statistics* was released for the first time in June 1968, containing annual credit union statistics for 1966. The second annual publication, containing data for 1967, is to be released in May 1969, and this second report will utilize for the first time a standardized format for credit union statistics in Canada.

The publication of these new data follows two years of extensive development work with various provincial government officials and members of the credit union movement.

Another significant development during the year was the commencement of publication, starting in the fourth quarter 1968 edition of *Business Financial Statistics*, of statements of revenue and expense, retained earnings and sources and applications of funds for each of the groups covered by the quarterly surveys. In the long run, the objective is to collect, compile and publish similar data (including balance sheets) for all categories of financial institutions, including those groups not presently covered, such as chartered banks, life insurance companies, holding and management companies, business finance companies and real estate operators and development companies.

The Division has continued to publish quarterly reports on commercial failures in Canada. These reports are based on material supplied to the Bureau under the provisions of Bankruptcy and Winding-up Acts. The number of failures and the amount of liabilities involved at the time of bankruptcy are published by region and by industry. Reports have also been issued monthly and annually on the total value of cheques cashed in fifty-one clearing centres in Canada from material supplied by the Canadian Banker's Association.

The Financial Statements Section, which conducts quarterly financial statements surveys of industrial corporations, continued publication of its quarterly *Corporation Profits* series. In addition, development work on other financial statements continued, and in 1969 the Section will publish for the first time data on balance sheets for each major industry group for each quarter since 1962.

During the year extensive efforts were devoted to developing computer-oriented operations in all phases of work, from bench-mark revisions through current survey procedures. The up-dating of bench-mark data and the revision of historical series from 1962 will be completed as soon as computer procedures and programming are finalized.

Increased efforts also were devoted to studies of concepts and measurement techniques related to the estimation of corporate profits, and a number of studies and projects were undertaken with the objective of improving the timeliness of the quarterly estimates.

Both the Financial Institutions Section and the Financial Statements Section continued development work related to the production of

financial flows in the corporate sector of the economy, and publication of a set of financial flow accounts including data developed by the Sections is expected early in the 1969-70 fiscal year.

In the Capital Expenditures Section, existing annual surveys are being continued to provide national, regional and industry estimates of intentions for the year ahead and realizations for the past year on capital and repair expenditures on new construction and on new machinery and equipment. Investment intentions by industry, by province, are published in *Private and Public Investment in Canada, Outlook* at the beginning of each year. The results of the mid-year survey of revised intentions are published in *Private and Public Investment in Canada, Mid-Year Review*. In 1967, for the first time the coverage of the mid-year survey of revised intentions was expanded to provide provincial data comparable to those published earlier as a result of the original intentions survey. However, owing to the substantial increase in workload such provincial detail could only be published at the end of the year. In 1968 it was possible to improve timeliness to the point of making available the provincial result at the same time as the national results and in the same publication. Prior to 1967, the coverage of the mid-year survey did not permit the estimation of revised intentions by province.

A new questionnaire for the mining industry (excluding oil and gas mining), which was developed in 1967 with the co-operation of representatives of the industry, provincial government officials and other federal government officials, was used in 1968 and the resulting capital formation data were compiled for publication in *Private and Public Investment in Canada, Outlook 1969*. The new questionnaire meets the requirements of the DBS, the federal and provincial Departments of Mines and other prime users, and provides improved data for the various users with elimination of substantial duplication in reports. Some difficulties were encountered with the new questionnaire and survey procedures, but most of the problems have been eliminated in time for the next annual survey.

Substantial progress was achieved during the year in the development of the quarterly survey designed to provide measures of capital investment for all sectors of the economy on a forecast and realization basis. Following extensive studies of the conceptual and operational problems involved in establishing such a survey, which is being conducted with the company rather than the establishment as the reporting unit, an initial set of questionnaires and supporting introductory

material was mailed in November 1968, to 36 companies based in Montreal and Toronto. Follow-up visits were made to each of these companies to discuss reporting problems and to reconcile lists of establishments which would be covered in the company reports. In February and March of this year, a similar approach was used with 50 companies having their head offices in the western provinces, and in April at least 60 companies will be added to the survey without a personal interview follow-up. The survey will be expanded further during 1969, with the objective of covering by 1970 about 500 companies responsible for approximately 60 per cent of annual business investment.

Other work during the year included the continuing program of improvement of existing surveys, including work on the development of a new approach for the electric power industry. Work was also continued on a project which is an attempt to measure capital spending by foreign-owned firms in Canada as compared with firms controlled by Canadian residents. This project, which was begun late in 1967, uses information already existing in the Business Finance Division and in the Corporations and Labour Unions Returns Act Division.

In addition to the construction data provided in the investment reports, which show expenditures on new and repair construction as reported by organizations paying for the work done, another report, published in June of each year and entitled *Construction in Canada*, provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. This report, issued by the Construction Section of the Division, also provides separate estimates for value of work performed by construction contractors and that performed by others engaged in construction work on their own account, as well as an estimate of the equivalent man-years necessary to carry out the annual program of construction. Information on types of structure is derived from the capital expenditures surveys mentioned earlier, which also obtain information on the labour and material content of own-account construction. The labour and material content of the construction contractors is derived from the results of a sample survey of construction firms conducted annually by the Construction Section.

During 1967, the Construction Section undertook a study aimed at determining the feasibility of a Census of the Construction Industry, the objective of such a census being to provide data on the organization and operational characteristics of the industry and to provide detailed industrial statistics to enable more accurate measurement of the industry's real output and productivity. As a result of

the feasibility study, the decision was made to implement such a census in a progressive series with each portion covering a construction industry sub-group or combination of sub-groups. The Mechanical Contracting Industry was selected as the first group to be surveyed, and following extensive discussions and negotiations with industry associations and company representatives across Canada, the census questionnaires were mailed in August, 1968. In terms of the broad goal of determining the feasibility of undertaking a whole series of projects towards the elaboration of a complete system of construction statistics, the Census of the Mechanical Contracting Industry is considered to be a success. It is expected that results of the census will be released in July 1969.

The Housing and Building Permits Section publishes a monthly report on building permits, which provides data on the number and value of housing units by type and the value of industrial, commercial, institutional and government building construction in more than 1,400 municipalities in Canada. The Section also issues a monthly report *New Residential Construction* containing the results of a nationwide survey conducted by the Central Mortgage and Housing Corporation, providing data on dwellings started, under construction and completed. These physical measures of housing are translated into values for the purpose of estimating quarterly and annual residential capital formation.

In addition to the production of current housing and building permit statistics, the Section, during 1968, completed work on a revised series of housing investment for the period 1951 to 1967. In this revision, a new method based on the systematic use of administrative records of the Central Mortgage and Housing Corporation was implemented, replacing a global method which contained many weaknesses and shortcomings. The Section also undertook a study of construction costs, designed to improve the cost factor required for calculating future investment estimates. In addition to being useful for investment estimates purposes, the project is intended to provide data on cost movements for various types of dwellings and different regions.

The Scientific Activities Survey Section has two regular surveys on scientific research and development: one of the Federal Government's activities and one of Canadian industry. In February, the analysis and statistical compilations resulting from the Federal Government Survey were released in *Federal Government Expenditures on Scientific Activities, Fiscal Year 1966-67*. The survey for 1967-68 was carried out during the year, and preliminary data will be available early in the 1969-70 fiscal year. During the year, the survey of

industrial research and development also was carried out and by the end of the year the compilation phase had begun. Preliminary data will be released early in 1969-70.

As in previous years, the Section has been heavily involved with other agencies interested in the field of scientific activities. Besides continuing its close co-operation with units such as the Science Secretariat and the Department of Industry, the Section has been actively engaged in preparing material for the Senate Special Committee on Science Policy.

Since 1963 the Division has worked with the Directorate for Scientific Affairs of the Organization for Economic Co-operation and Development in its efforts to standardize research and development concepts and practices for facilitating international comparisons and to promote further refinements in measurement of research and development and its implications. In December, 1968 the Section Chief participated in the conference held in Frascati, Italy, to discuss a proposed revision of the O.E.C.D. manual of standard practice for research and development surveys. Many valuable proposals were considered and work will continue during 1969-70 to achieve common standards in this area.

The National Wealth and Capital Stock Section continued development of estimates of fixed capital flows and stocks. During the year, preliminary estimates for the manufacturing sector covering the period 1961-1967 were made available, supplementing the 1926-1960 estimates published in 1967. Preliminary estimates for non-manufacturing sectors of the economy (excluding housing) also were completed during the year, and work is continuing on the improvement of these preliminary data and on the preparation of reference material describing the sources and methods underlying the estimates.

The Section provided a considerable amount of information to the Economic Council of Canada during the year, especially data for use in forthcoming Council studies relating to investment projections to 1975.

In connection with supplying information to the Economic Council and other researchers, efforts were made during the year to develop information files in the form of punched cards and magnetic tape, in addition to computer print-outs and standard tabular formats. Further development of data files in machine-readable form is planned for the current year.

Corporations and Labour Unions Returns Act Division

The Corporations and Labour Unions Returns Act was passed by Parliament in April,

1962 and is administered by the Dominion Statistician under the authority of the Minister of Industry, Trade and Commerce. The purpose of the Act is to collect financial and other information on the affairs of corporations and labour unions carrying on activities in Canada. Such information was considered necessary to evaluate the extent and effects of non-resident ownership and control of corporations in Canada and the extent and effects of the association of Canadians with international labour unions.

The information required of corporations is divided into confidential and non-confidential sections. The non-confidential section of the return includes information on the incorporation, officers and directors, and ownership of the corporation's issued share capital. The confidential section of the return includes financial statements of the corporation and a schedule of selected payments to non-residents for dividends, interest and certain business services.

Labour unions affected by the legislation are required to provide similar kinds of information, also divided into two parts. In the non-confidential section, the union furnishes a copy of its constitution, names of its officers, number of members and certain information on locals, trusteeships and collective agreements. The confidential section of the return includes the union's financial statements and information on the dues and assessments received by international unions from members of those unions resident in Canada.

The passage of this Act in 1962 created an additional requirement for the reporting of financial data by a substantial number of corporations in Canada and the necessity to duplicate, to a considerable extent, tabulations of corporation financial data being carried out by the Department of National Revenue. In order that this duplication might be avoided, legislation was passed by Parliament which eliminated the filing of one corporation financial statement and enabled a joint statistical operation to be undertaken in this area.

The amendment to the Corporations and Labour Unions Returns Act, passed in 1965, accomplished these objectives by relieving a corporation from the obligation of filing a financial statement under the Act if the corporation had filed a financial statement under the Income Tax Act. At the same time, access to corporation income tax returns was made

available to the Dominion Statistician. A joint program of corporation financial statistics was developed that provides the Department of National Revenue with statistical information on the taxation of corporate income and, at the same time, provides data for the purpose of the Corporations and Labour Unions Returns Act and for other statistical purposes.

The publication *Corporation Financial Statistics*, released in October 1968, is the first publication based on this joint statistical program that was developed following the amendment to the Corporations and Labour Unions Returns Act. This publication is based on the information contained in the accounting records of the corporation and provides information on the operations of corporations, including income, expenditures and profits, and on the financial position of the corporation including details of the assets, liabilities and the equity and a statement of retained earnings indicating the disposition of current earnings. A second publication, *Corporation Taxation Statistics*, deals with the taxation of corporation income, including the industry earning the income on which the income tax is based, the province in which that income was earned and the size of the firms paying income taxes. In addition, a detailed reconciliation of company book profit with taxable income is provided that indicates the magnitude of the main provisions of the Income Tax Act as well as the magnitude of the main items of income and expenditure which are treated differently in the Income Tax Act than in company books.

The Corporations and Labour Unions Returns Act requires that the Dominion Statistician prepare an annual report summarizing both the confidential and non-confidential information submitted by corporations and labour unions. The first report was released in July 1965 covering fiscal periods of corporations and labour unions ending in 1962. Subsequent annual reports under the Act are released in two parts - Part 1 relating to corporations and Part 2 relating to the labour unions.

The amendment to the Corporations and Labour Unions Return Act passed in 1965 has affected the statistics contained in the annual report under the Act relating to corporations in two important ways. The access to financial statements of all corporations, and the integrated statistical program that was undertaken, had permitted a compilation of statistics for corporations exempt from the reporting provisions of the Act but subject to the provisions of the Income Tax Act. This additional information has provided more complete measures of the magnitude of business in Canada and has permitted a better assessment of the importance of foreign-owned corporations in the industries in which they

operate. A number of classes of corporations are exempt from the reporting provisions of the Act and it was therefore more difficult to assess the magnitude of the operations of these firms. It has now been possible to determine the magnitude of the exempt firms and information has been included in the publications. The inclusion of these figures provides an improved assessment of the relative magnitude of foreign-owned firms in Canada. The other major area of business activity not included in these publications involves provincial and municipal government enterprises.

The second important aspect of the 1965 amendment is that the additional information available from the corporation income tax statement has provided assistance to many corporations in Canada in the determination of the reporting status under the Corporations and Labour Unions Returns Act. The resulting review of corporations reporting liability has indicated a misunderstanding of the reporting requirements of the Act, particularly amongst small and medium-sized firms. In the initial stages of the implementation of the legislation, 25,000 corporations submitted complete returns, while more than 100,000 established their exempt status under the Act. In the absence of a complete list of corporations in Canada, it was not possible to identify and contact each corporation until after the 1965 amendment.

The extended program that was undertaken in 1966 to acquaint corporations with their reporting responsibilities under the Corporations and Labour Unions Returns Act for the year 1965 resulted in 11,017 additional corporations filing returns under the Act. Some of these corporations would be new in 1965 as the number of corporations incorporated in Canada is growing every year. An additional number of corporations which had been in business in earlier years would have become reporting corporations because of increases in either assets or sales. The balance, the largest group, would have been in business in previous years and become aware of the reporting responsibility under the Act for the first time.

The non-confidential information required under the Act of corporations provides information for the linking of corporations through inter-corporate ownership of share capital. Each corporation reports the classes of shares, authorized and outstanding, the voting rights attaching to each class of share, and the numbers of shares issued and outstanding to shareholders with addresses in Canada, outside Canada and with no address of record. In addition corporations report the name and address of each corporation owning 10 per cent or more of any class of issued share. In the

publication *Inter-Corporate Ownership*, released in January 1969, corporations which had common ownership by another corporation or were linked together in ownership relationships were grouped together to form ownership complexes. These corporations were grouped when there existed inter-corporate ownership of voting rights of 10 per cent or more. The inter-corporate ownership complex begins with a holding corporation in which no reporting corporation owns more than 10 per cent of the voting shares. This group of corporations includes a number of foreign-incorporated companies which are not reporting corporations but are corporations holding more than 10 per cent of the voting shares of a reporting corporation. This publication makes available to the public non-confidential information required under the Corporations and Labour Unions Returns Act and indicates to some extent the magnitude of inter-corporate relationships in Canada.

Central Personnel Record System

The Central Personnel Record System for the Public Service of Canada was established by Treasury Board Minute 654427 dated April 12, 1966. The principal responsibilities of the System are: the servicing requirements of the Treasury Board and the Public Service Staff Relations Board for information relative to collective bargaining; providing the Treasury Board Staff with data to support the development and assessment of policies and standards for personnel management in the Public Service; developing information for Treasury Board use in determining manpower requirements and for Public Service Commission use in planning its staffing programs; supporting the management of departments and agencies of the Public Service with information enabling them to develop and assess their personnel administration policies and standards; servicing DBS with data required to support its statistical program and reports; and through the Personnel Records Coding and Co-ordinating Committee, establishing and controlling the code system used in automated personnel record system in the Public Service.

During the year under review the CPRS has increased its computer file coverage of employees to approximately 90 per cent of the Federal Public Service. Data for the remainder presently continue to be obtained by use of statistical questionnaires. The Personnel Action Forms Study has progressed more slowly than had been hoped but should be completed in the coming fiscal year. A Benefit Usage Survey for the Operational Category of employees was completed and surveys for the Scientific and Professional, Administrative and Foreign Service, Technical and Administrative Support

Categories were initiated. A system to support collective bargaining requirements of the Treasury Board and the Pay Research Bureau was planned and will be completed soon. A considerable number of tables and lists containing data of use to departmental personnel administrators were programmed.

The CPRS has been handicapped during 1968-69 as a result of the enormous volume of paper transactions resulting from the Classification Revision Program, Collective Bargaining Agreements, and extensive departmental reorganizations. Significant progress, however, has been achieved in improving the timeliness of some parts of the computer file.

The Treasury Board, which is responsible for the policy control and general direction of the CPRS, has decided to transfer the CPRS from the Dominion Bureau of Statistics to the Department of Supply and Services effective April 1, 1969. This move results in a closer organizational relationship between CPRS and other major planning and production units associated with the overall information systems relating to pay, personnel and employee benefits.

Governments Division

In the 1968-69 fiscal year the Governments Division entered a period of program consolidation which it is expected will continue through to 1970-71. No new projects were initiated during the year under review. However, some considerable resources were devoted to projects commenced in earlier years but which are not yet fully operational.

The Division continued its major role in the Interdepartmental Coding Committee. The Committee's recommendation respecting the classification of federal expenditures coded by economic objects was implemented as of April 1, 1968 and the first computer print-outs by economic object became available in August. As with most major projects of this nature, a great deal of editing has been required and is still being conducted by this Division. It is hoped that by mid-1969 the system will be working at an acceptable level, *i.e.* that the print-out will constitute a reliable base for the economic analysis of federal government expenditures. Concurrently, the Division has made substantial contributions to the development of a classification and coding system for federal non-tax revenue. It is expected this phase of the overall program will be ready for implementation as from April 1, 1970. The final phase of this program, *i.e.* the classification and coding system for federal tax revenue, assets and liabilities, is to be undertaken upon the completion of the proposals for

non-tax revenue. Three meetings were held with officials of the Government of the Province of Ontario to assist them in developing a coding and classification system similar to that being developed with the federal government.

During the year under review, considerable time was spent on the twenty-year historical revision of the government sector of the national accounts covering the years 1947-67 inclusive. This revision was required because of improved data, amended concepts and especially in order to bring the past compilations into closer conformity with the standards set out for national accounts by the Statistical Commission of the United Nations Economic and Social Council.

Considerable progress was made during 1968-69 in the development of the "Financial Flows" series of statistics. In the federal and provincial government areas, financial flows were compiled on an annual basis for the years 1962-1966 and quarterly flows were completed for the period from April 1, 1962 to date. The financial flows for provincial government enterprises were compiled on a quarterly basis for 1966-1968 inclusive and for the federal government enterprises were kept up on a current basis. All of the above flows work will be continued on a quarterly basis and is scheduled for publication by the Balance of Payments and Financial Flows Division commencing in the summer of 1969. In the local government area, financial flows are still under development.

The Eighth Federal Provincial Conference on Municipal Finance Statistics which was convened in April, 1967 as a continuing conference has held four sessions to date, three of which were in 1968-69. It has substantially completed its deliberations on the Division's proposals for a new classification of revenue and expenditure, and is currently considering the asset, liability and equity proposals. Three or four more sessions will be required to complete the current program. The classification on coding system being developed will provide a common framework for reporting on financial transactions by all municipalities and this will be compatible with the systems employed by the federal and provincial governments, thus making for sound intergovernment comparisons.

During the year, the Division organized a DBS Advisory Committee of Users of municipal finance statistics. This committee, comprised of representatives from all levels of government and certain of their agencies and associations, certain research organizations and

universities, as well as other bodies, held its inaugural meeting in October 1968. Further meetings will be held from time to time. It is intended that this committee examine the complete range of user requirements in the field of municipal finance, and advise DBS and other Canadian statistical agencies on the best ways and means of satisfying demand through co-ordinated effort.

With the view to improving its reports on provincial debt, the Division prepared comprehensive formats for use in the presentation of the provincial debt statistics. These have been referred to the provinces for comment. It is hoped that, with the aid of provincial response, a generally acceptable and a much improved presentation will be developed in the near future.

ECONOMIC STATISTICS BRANCH

As the name of the Branch implies, the majority of its activities are concerned with the production of statistics related to the economy of the nation and designed to be of assistance in the formulation of policies and programs that affect its condition and growth. The Branch directs the operations of six divisions and an "Input-Output" research and development staff. Branch activities are principally concerned with the collection, processing, analysis and publication of statistics derived from business establishments. These consist, in general, of production, sales and service "units" in contrast to the reporting universe of the Financial Statistics Branch which, so far as the private sector is concerned, deals with companies.

For the most part the collection of the information is carried out by means of hundreds of monthly, quarterly and annual "mail type" surveys of varying sizes although a number of "enumeration type" surveys are also involved. The Branch tends to concentrate on production or sales of commodities and services, materials used, employment, prices and imports and exports of commodities.

During the past two years, the total number of man-years allocated to this activity had declined while the increases in financial requirements have generally been to meet uncontrollable expenses, *e.g.*, economic salary revisions. Despite these constraints the Branch has found it possible to pursue its major objectives of maximum resource utilization, the timely release of all statistical series and the development and maintenance of a statistical program which will meet the requirements of statistical users.

The necessary staff to meet uncontrollable increases in work-load in certain areas have been found by the introduction of more efficient methods and by reducing or suspending lower priority projects. Further progress has

also been made in the areas of timeliness and automation, as well as in the development of the Branch statistical program, with special emphasis in the areas of prices and the service industries.

External Trade Division

The External Trade Division is responsible for planning the content of Canada's commodity trade statistics and for their production, analysis and publication. Monthly, quarterly and annual reports and special tabulations provide data on trade by commodity, by country, by province of customs clearance for exports and imports, as well as by mode of transport, by region of lading for exports, and by tariff item by country for imports.

A complete reorganization of work methods employed and of the professional, technical and administrative responsibilities of the Division has largely been completed. As a result of the addition of several commodity officer specialists and other technical staff, many far-reaching improvements in classification have been initiated. The facilities for continuous and regular review of the commodity classifications to accommodate expanding and changing needs of international commodity trade have been improved. In addition, an historical index of the dates to which any import class can be traced was developed and published.

The addition of qualified professional staff has resulted in an improvement in the ability of the External Trade Division to produce more interpretative and analytical commentary concerning its statistical output, such as articles prepared for the *Canada Year Book*, the *Canada Handbook*, and for *Foreign Trade* which is published fortnightly by the Department of Industry, Trade and Commerce. A quarterly commentary on leading developments in Canada's trade entitled "The Quarterly

Review of International Trade Trends" will appear regularly as a *DBS Daily Bulletin* release during 1969, based on a requisite number of seasonally-adjusted commodity series.

With the objective of improving the timeliness and accuracy of the monthly *Trade of Canada - Imports*, while at the same time reducing costs, a sampling procedure for processing low value import from the United States was adopted in January 1969. Improvements in timeliness of monthly reports continue to be made with monthly exports gaining one full month over one year ago compared with a gain of two weeks in the release of import data over last year. Commencing with January 1969 the monthly deseasonalization of Canada's exports and imports by major trading areas is being done in the External Trade Division for publication and to serve as inputs for the balance of payments and national accounts.

Continuous efforts are being made to clear up the backlog of basic annual publications and considerable progress in this direction has been achieved. During the fiscal year the *Trade of Canada, Volume I (Summary)* 1960-1964 edition, *Volume II (Exports)* 1965-1966 edition, and *Volume III (Imports)* 1962-1964 edition, were prepared and published, and further editions are under preparation and scheduled for release during 1969. The *Review of Foreign Trade* for 1960-1963 and 1964-1966 are also expected to be published during 1969.

Preliminary and developmental stages of a new quarterly tabulation of Exports by United States Census Subdivision of consignment have been completed with the first quarterly tabulation expected during the second half of 1969.

The Division has begun to devote considerable research and study to valuation problems, particularly those related to Canada-United States automotive trade, as part of a broad program of quality improvement and an overall reconciliation of counterpart trade statistics of the two countries.

Efforts continue to be made towards more improved timeliness and quality of its total publication program as well as special compilations and tabulations produced for government and industry, which are required more and more for quota surveillance and anti-dumping investigation.

Input-Output Research and Development Staff

During the year the compilation of preliminary data for the 1961 Input-Output Table was completed. These data give information on the production and disposition of goods and

services among 187 industries and various sectors of final demanders. Due to the confidentiality of some of the information available in the most detailed tabulations it will not be possible to release these data to the public. This information, however, will be used for statistical tabulations and analyses at DBS. To facilitate public data requirements and the needs of a variety of users, the detailed tabulations were aggregated into four sizes of Input-Output tables. Three of the aggregate tables will be published shortly. The most detailed will distinguish 110 industries and 197 commodities.

These tables and various associated data have been used in the construction of analytical models which may, on certain assumptions, be used to analyze the interrelationships among industries. The effects of changes in the demand for particular commodities by final consumers can be assessed in terms of their impact on various industries and on the incomes they generate. Planning commenced on a study of the feasibility of establishing more complex models of the Canadian economy to assess the usefulness of such models as a major tool in economic analysis.

The Input-Output Staff continued its work on a project designed to provide detailed information on the goods and services purchased by each level of government. During the year, preliminary results were obtained for federal and municipal government expenditures and considerable work was completed in the analysis of provincial government expenditures. The staff also provided assistance in the designing of a questionnaire to obtain data on the inter-provincial shipments of goods by manufacturers.

Technical advice, assistance and data were given to a number of government departments and agencies at both the federal and provincial level. The departments of Finance, Industry and Forestry and the Atlantic Development Board participated in discussions on the uses of Input-Output tables and associated analyses. The staff continued its work on an up-dating of four Input-Output tables for the Atlantic Provinces under a contract with the Atlantic Development Board. Work on this project, which relates to 1965 data, was nearing completion at the end of the fiscal year though a considerable amount of analysis of these tables will have to be done this coming year.

Labour Division

The Labour Division is concerned with production of a broad and varied program of establishment surveys and administrative statistics. The subject matter covered includes

statistics of labour input and labour cost, occupational job vacancies, pension plans, and data relating to the operation of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration.

The fiscal year 1968-69 for the Employment Section was characterized by improved timeliness in the release of statistical data, the complete automation of the small establishment survey, and advanced planning for a completely automated large establishment survey. To facilitate the introductions of computerization and to smooth the way for future developments in this area, the clerical staff in the Section attended an elementary course in electronic data processing. Major changes in the physical layout were carried out to reflect the introduction of the new functional organization of the Section.

During the year, the preliminary results of the first comprehensive survey of selected employer labour costs in Canada were published. The purpose of this survey is to quantify the various elements in the total wage package and to relate supplemental pay to total remuneration in the various manufacturing industries.

In May 1968 preliminary employment, hours and earnings data for large establishments were released one full month earlier than the former advance statement, as a result of refined programming, intensive follow-up and streamlined processing methods. Also with January 1969 data, 32 urban areas were added to the geographical coverage of the large establishment program bringing the total to 88 centres for which data are published.

The complete automation of the small establishment survey, in addition to ensuring improved timeliness, allowed for the publication of increased industrial and geographical detail in the *Estimates of Employees by Province and Industry*. Beginning with January 1969 data, the coverage of the latter publication was increased to the full spectrum of industries and data were published for the four largest urban areas in Canada.

In May 1968 a publication entitled *Seasonally-Adjusted Employment Indexes* was issued to replace what had heretofore been a restricted document. For all employment index series seasonally-adjusted data, prior adjustment factors, final seasonal adjustment factors, and the final seasonally-adjusted series were shown.

To conserve resources and to further spread the reporting burden among respondents, the Annual Survey of Earnings and Hours of

Work in Manufacturing was converted to a sample basis and an additional sample of small establishments in manufacturing was included. It is hoped that the results of this experiment will be to show for the first time adequate earnings and hours data for small establishments.

The Unemployment Insurance and Manpower Section compiles and publishes statistics reflecting operations of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration. In conjunction with the UIC and the Department of Insurance, a special survey of claimants was conducted, to record and analyze the pattern of contributions and claims. This survey will be used by the Department of Insurance as a basis for recommendations to the UIC.

The Chief of the Section participated in a DBS-UIC Committee established to review and assess information provided to the UIC by DBS in the light of changing operations of the Commission. Planning has been initiated to develop claims statistics directly from magnetic tapes produced in connection with mechanized claims pay operations to be gradually introduced into UIC offices across the country.

Substantial staff savings were achieved in the Section by mechanization of a number of clerical operations formerly performed manually. Revised sampling arrangements introduced in co-operation with the DBS Sampling and Survey Research Staff also contributed to these economies.

The Pensions Section initiated negotiations with Provincial Pension authorities to establish a co-operative uniform statistical program using administrative records as the primary data source. The arrangement will eliminate multiple requests to respondents for identical information and achieve economies by a division of responsibility for collection and production of statistics between provincial pension bodies and DBS, respectively.

During the year a small pilot survey was developed to test the feasibility of a quarterly survey of trustee pension funds to provide current financial flow data. On the basis of the results of this pilot project, a sample survey of the larger pension plan is being developed to provide publishable data.

During the year professional staff of the Pensions Section participated in a symposium on housing organized by the Central Mortgage and Housing Corporation. At this Conference the DBS representative presented a report on pension funds as a source of mortgage money available for investment in housing.

In the Job Vacancy Survey Section a major development involved the completion of the structuring of multi-establishment firms into sets of units for reporting job vacancies. A program of intensive experimentation, testing and evaluation of concepts, definitions, procedures and questionnaires was carried out. This involved small-scale test surveys, field workshops and head office conferences. As a result of the above activities the final design and content of mail and interview questionnaires were determined and implemented by September 1968. During the same period, a large-scale computer program involving many unique features was completed. This program included the following major components: a system which maintains a master file of all reporting units; provides for sample selection; print-out of labels for automated mail-out and follow-up; a basic record-keeping system for field operations; and a flexible data output system incorporating estimates of reliability of data for all output.

By the end of 1968 monthly estimates of job vacancies by occupations for large firms in the manufacturing industry were being produced regularly for internal evaluation purposes. The program is, therefore, well advanced towards providing the Department of Manpower and Immigration with data to meet their requirements in 1969.

In the Analysis and Development Section an investigation of duplication in the collection of labour data by federal government departments was undertaken during 1968 at the request of Treasury Board. This investigation involved review of the collection activities of eight federal departments operating some 90 surveys which were primarily concerned with labour data or obtain such data in conjunction with other statistics. A report was prepared containing recommendations for action to reduce response burden and elimination of duplication.

Manufacturing and Primary Industries Division

The responsibilities and the organization of the Division have remained basically the same over the past year. The major change of interest is the transfer of responsibility for mining statistics to the new Energy and Minerals Section. Emphasis has continued to be placed on timeliness and quality of data and additional steps have been taken to re-assess the utility of projects, to remove duplication of enquiry and to introduce more appropriate data processing systems.

Project re-assessment has given rise to a number of changes in the annual industry

reports including the deletion of a number of tables of marginal utility. In addition, a review of special services to users resulted in the cancellation of 24 special statements which could not be justified in relation to other priorities of the Division. It is also of interest to note that the Division has been successful in introducing a formal work improvement program in the operational area as well as instituting a divisional records system.

Further results of re-assessment of priorities and more efficient operations are that the Division has been able to expand its activities in a number of areas without any increase in manpower. The following examples are illustrative:

- (1) The current shipments, inventories and orders series now includes monthly data for all twenty major industry groups, and seven major economic use groups are being published with and without seasonal adjustment; in addition, the series was adjusted to the most current benchmark.
- (2) Special tabulations on containers are now being published annually.
- (3) The survey of metropolitan sales of gasoline has been expanded to include more geographical data.
- (4) A new survey on production and disposition of tobacco products has been implemented.
- (5) A new survey dealing with brewery products has been initiated.
- (6) Preliminary work has been completed in connection with the survey of interprovincial and foreign shipments of selected commodities. Although it was stated in last year's report that the survey would be implemented during this fiscal year, problems at both the provincial and federal level required that it be deferred until 1969.
- (7) A continuing annual project involving tabulation of selected financial and commodity data is in process on behalf of the Emergency Measures Organization.
- (8) Extensive tabulations were undertaken on behalf of: the Combines Investigation Branch to permit the study of concentration in Canadian industry; the provinces of British Columbia and Saskatchewan for the development of economic atlases; the Area Development Agency of the Department of Industry in relation to a study of economic growth in the Georgian Bay area.
- (9) An increase in the number of *ad hoc* enquiries to well over 15,000.

The Division was able to make further gains in timeliness through the use of preliminary industry bulletins and changes in editing procedures. For example, preliminary data for 68 industries (1967 Census of Manufactures) have been released as compared to 37 industries (1966 Census of Manufactures); in the previous fiscal year. Availability of data from the monthly survey of shipments, inventories and orders has been improved by about two weeks; and finally the availability of data from monthly commodity surveys for use in the index of production have shown a further improvement of about one or two days.

Regrettably, the Division continues to experience difficulties in the timeliness of the general reports on the Manufacturing Industries of Canada. Although some gains have been achieved through preliminary bulletins, significant improvements will not be obtained until additional professional resources are available and computer programs have been updated and converted to the new computer. It is hoped that such improvements will begin to have an effect on this series in the latter part of 1969.

In an attempt to improve the quality of data and decrease the response burden, the Division has participated actively in inter-divisional working groups engaged in: (a) the use of administrative records to replace or supplement industry surveys; (b) the study of employment statistics to examine and, where practical, remove duplication; (c) the study of co-operatives to plan, develop and implement a co-ordinated system of reporting; and (d) the study of company accounting systems to develop co-ordinated reporting procedures for company-establishment statistics for multi-unit companies.

Again this year, the Division was unable to complete the implementation of the Industrial Commodity Classification. It is now planned that it will be introduced with the 1970 Census of Manufactures.

Although not directly measurable in terms of quality and timeliness, the extensive divisional training program is important in this respect as well as in terms of career development. Approximately 1300 man-days were devoted to training during the year, of which 20 per cent comprised language training. The remainder was taken up by courses on management training, records management, communications, organization theory and practice, data processing, economics, accounting, statistics, systems and procedures, secretarial training and work improvement. The Division also participated in the training of a foreign student who was attached for a period of seven months.

Finally, although only in the initial stages, the Division is in the process of planning a completely automated data processing system for the annual Census of Manufactures, Mining and Logging. This is a joint project involving personnel of other divisions as well as participation by personnel of interested provincial statistical offices. Because of its complexity and scope it is not expected that the system will be operative before 1973-74.

Merchandising and Services Division

The function of this Division is to collect and publish data on the retail, wholesale and service sectors of the economy, as well as to undertake numerous special studies and surveys in areas related to the movement of goods from the manufacturing level to the final consumer.

In general, the Division is organized into eight sections: administration, retail, wholesale, service, special projects, quinquennial census, research and development, and operations. One major change in the structure of the Division during the past year was the creation of a computer unit within the Operations Section. The function of this unit will be to assist in the development of a systematic program to convert many of the Division's manual operations to computer systems, as well as to co-ordinate the activities of the Division and the Sampling and Survey Research Staff in the development of new sampling methodology.

All editing and coding of the returns received from the 1966 Census of Retail and Service Trades (including approximately 250,000 retail businesses and service outlets) were completed during the fiscal year. Two advance bulletins on retail trade and the first advance report on the service trades were released. By September 1969, all planned reports on the 1966 Census of Retail and Service Trades should be available to the public. Prior to actual publication of these data, the Division devoted a significant proportion of time to meeting the numerous requests for special tabulations on retail trade from market research agencies, planning boards and business concerns.

Serious conceptual difficulties continued to plague the 1966 Census of Wholesale Trade during the past year. However, significant progress was made in resolving many of these problems and it is now expected that the data will be completely edited by July 1969, barring additional unforeseen difficulties. Further, because of the reallocation of some divisional staff to other activities, it was necessary to cancel the annual Wholesale Trade survey for 1967.

For the 1968 survey of Wholesale Trade, a major innovation has been introduced. Because of serious limitations on staff resources, it was decided not to undertake a complete census of wholesale merchants for 1968 but to select a sample representing about one-quarter of their total number of 20,000 for survey purposes. Other types of wholesalers, however, such as agents and brokers, manufacturers' sales branches, assemblers of primary produce and co-operatives, are being surveyed on a full coverage basis. In order to increase the reliability of the data obtained, three different questionnaires have been designed to suit the individual requirements of each type of operator, replacing the previous uniform questionnaire. The questionnaires were mailed out towards the end of the fiscal year.

To replace the depleted 1951-based monthly sample of wholesale merchants a new sample was designed and implemented. The new sample makes possible a more refined breakdown of sales by kind of business. For purposes of historical continuity, the monthly and yearly wholesale trade series during the period 1952-1968 have been revised on the basis of the results of the 1961 Census of Wholesale Trade and are expected to be available shortly.

A new survey of construction machinery and equipment covering the year 1967, was completed early in 1969. The results provide an account of the Canadian market for over 70 major commodities in terms of units and dollar sales.

During the year, plans were completed for a sample survey of some 30,000 retail businesses in order to measure the sales of specific classes of commodities during 1968. This study was formerly an integral part of the decennial Census, but was separated in order to expedite the completion of the new quinquennial Census program which commenced in 1966. Henceforth, retail commodity surveys will also be undertaken on a quinquennial basis rather than decennially as in the past--in each case, two years following the census year. It is expected that the results of the 1968 commodity survey will be available by approximately March-April 1970.

During the past twelve months, much of the activity in the area of retail trade has centred around the development of a new retail trade sample. The design of this new sample is based on almost total mechanization of the system used to collect the raw data each month, including mail-out, editing, imputation, follow-up and tabulation of data on a "direct-to-printing" basis. The much larger sample size which is contemplated will make possible the publica-

tion of data for major metropolitan areas and for approximately 30 kinds of business, as contrasted with the 18 trades shown at present. It is also expected to increase substantially the quality of the data through improvements in the measurement of retail "births" and "deaths".

It is planned to introduce the new sample in January 1970 along with an early estimate of retail trade, which will be published 10 to 14 days earlier than the regular retail trade report. In mid-1968, mechanization of the existing retail trade survey was undertaken to improve the timeliness of the series pending implementation of the new design.

Efforts to improve timeliness were carried on in other directions as well. The timing of all monthly publications was examined, improvements introduced where possible and target dates set. This timeliness study has proven very satisfactory and has resulted in the publication of reports on predetermined dates with no appreciable decline in quality. As this is written, a similar study is being undertaken for all annual publications. Due to the extent of planning and control necessary for these more elaborate surveys, it is planned to make use of the "critical path" technique. The application of this concept of network analysis is expected to shorten the completion time of annual retail trade and other surveys.

In other areas of retail trade, there have also been several new developments. One of these was the planning and design of a new annual survey of department store firms which, together with an extension of the annual chain store survey of the general merchandise trades, will make possible the publication of a revised annual series on department stores. In addition, this study will enable DBS to assess the impact of "births" and "deaths" on the department store universe.

A number of annual surveys, which had been interrupted because of the 1966 Census of Merchandising and Services, were reinstated during 1968 for the 1967 calendar year. These included the surveys of shopping centres, chain stores and voluntary group stores. The shopping centre survey was extended, for the first time, into the service trade area, in an attempt to measure the influence of such trades on the rapid growth of shopping centre sales during the past decade.

During the year, work was completed on the 1969 edition of the *Market Research Handbook*. It contains demographic, economic, manufacturing, merchandising and marketing data compiled from dozens of diverse DBS publications. This new *Market Research Handbook*, which will be published in May 1969, has been substantially expanded over previous editions.

At present the staff of the Research and Development Section is engaged in developing the terms of reference for a study on the economic effects of suburban shopping centres on downtown shopping areas. It is hoped that some preliminary results of this study will be available by the fall of 1969.

Reports on the 1965 surveys of operating results of independent drug stores, automobile dealers, fuel dealers, jewellery stores, book and stationery stores, camera and photographic supplies stores and sporting goods stores were published during the 1968-69 fiscal year. During this year, also, the manuscripts for the 1966 surveys of operating results of independent and chain food stores were prepared and the reports published.

The manuscript for the 1967 annual report on *Farm Implement and Equipment Sales* was prepared and its publication is expected very shortly. In the interim, all monthly reports in this series were released on schedule.

The survey of Destination of Manufacturers Shipments for 1967 has proceeded according to schedule during the year and it is expected that the results will be available during the last half of 1969. This survey will measure, in total value terms and by industry, the movement of merchandise from manufacturing plants to each province and region of Canada and to destinations outside Canada.

The mail-out for the 1968 survey of Funeral Directors was undertaken during February 1969. This survey is very similar to the one carried out during 1965 for the year 1964.

Preliminary data resulting from the annual survey of direct selling--which covered two years, 1966 and 1967--were released in December 1968. Future annual surveys will be expanded to incorporate the direct sales of wholesalers and service establishments.

In the area of credit statistics, a major effort was made to improve timeliness in the monthly publication. The release date for data in the monthly bulletin *Credit Statistics*, was reduced from around 10 to 12 weeks following the survey month to approximately 6 weeks, in an effort to meet advanced target dates. A major undertaking affecting the consumer credit series will be the move to a new benchmark and the design of a new sample in order to improve the series on retail credit outstanding through department stores, furniture and appliance stores, motor vehicle dealers and other retailers. Current statistics are based on modified 1951 Census data and consequently require revision based on both the recently

published 1966 Census and selection of a new reporting sample in conjunction with the proposed new sample for retail trade. Substantial gains in quality and timeliness can be expected from the fully automatic and computerized system which will be put into effect not only for the retail credit series but also for other contributors to these series, such as sales finance companies and consumer loan companies. On completion of current intercensal revisions in the consumer credit series, a special publication will be released, treating its concepts and development in depth and providing consolidated historical statistics.

It is anticipated that the implementation of the new retail trade sample will concomitantly also make available regular periodic statistics on retail inventories. These data will be published in a new quarterly series for department stores, chain stores and independent stores, by kinds of business at the Canada level. Provided sufficient need exists, efforts will be made to publish inventory data at the provincial level as well.

A task force, centred in the Merchandising and Services Division, was established early in 1969 to review the existing statistical program in the retail, wholesale and service trades as part of the preparation for the 1971 Census, and in particular to develop a long-range program for expanding collection and publication of data in the service field.

Prices Division

The function of the Division is to collect, compile and publish data on prices and consumer expenditure. The Division is divided into three subject areas--Retail Prices and Living costs, Industrial Prices, and Central Research. In the first group are included the measurements of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing statistics on family expenditure for various types of families. Industrial Prices, on the other hand, cover measurements of price movements in the production and distribution of commodities and services in which the primary focus is on the prices of the outputs and inputs of individual industries within the standard industrial classification. The Central Research group co-ordinates research and analysis in prices in areas common to the other subject areas, including the treatment of quality change, analytical techniques and price index methodology.

The regular monthly issues of *Prices and Price Indexes*, which includes all price statistics published by the Division and the earlier released monthly issues of *Price Movements* in which sensitive indexes are selected for early release, continued to be published during the year.

The main emphasis during the year was in preparing the base for an expansion of the statistical program for the Prices Division. This preparation included a considerable staffing campaign and the maintenance of the credibility of existing statistics through extensive revision projects.

In the field of retail prices and living costs the Consumer Price Index was brought into sharper focus for current analyses through its conversion and publication, in early 1969, on a 1961, rather than a 1949, time reference base. The index is thus more readily comparable with associated economic indicators such as indexes of wages and salaries and of employment which are likewise published on a 1961 base. A study of the concepts, coverage and content of the national and regional city consumer price indexes was begun at the end of the period under review with the aim of updating the basket of consumer goods and services in the light of current family spending patterns and of reviewing the characteristics of the population groups to which these indexes refer. The results of this revision program, including some broadening of the number of separate cities for which consumer price indexes are prepared, are expected to be introduced during 1970.

The recently established Comparative Living Costs Section published a study of interurban retail price differentials covering about three-quarters of the consumer budget for a selection of seven major Canadian cities during 1968. Plans call for these place-to-place retail price comparisons to be broadened in scope so as to include shelter price differentials and also to be extended in terms of wider geographic coverage. The Section has also been carrying out exploratory studies aimed at measuring differentials in living cost conditions in relatively isolated northern Canadian communities. In this connection, during the year under review, staff members visited settlements in the Eastern Arctic as well as in the Mackenzie River region of the Northwest Territories for the collection of price and living cost data.

The Family Expenditure Section published complete results of the 1964 eleven-city general expenditure survey, showing detailed expenditure patterns in terms of a number of family characteristics including city, family

income, family type and age of head of household. The processing of a similar recall survey, involving 2,000 urban family records, carried out early in 1968 and referring to the calendar year 1967, also constituted an important activity of the Section during this period. Analysis and publication of the results of this survey are planned for the latter part of 1969. A detailed food expenditure survey involving each month approximately 1,000 urban and rural household in the completion of two-week food diaries commenced in January 1969 and will extend through the calendar year. In addition to providing information on food purchasing patterns, this survey will also yield expenditure data on a range of non-food items normally purchased in supermarkets. Planning has also commenced for a large-scale full-budget family expenditure survey, covering both urban and rural families, to be conducted early in 1970 and covering the year 1969 on a recall basis. It is anticipated that this latter survey will yield approximately 15,000 usable household schedules and that detailed tabulations will allow for classification of spending patterns by a large number of family characteristics.

In providing the statistical support to the Canadian Government's system of allowances for civilian and military personnel serving outside Canada, the International Prices Section analysed full budget surveys of comparative retail prices and living costs at 47 foreign locations. Additionally, during the year a continuous review of the validity of existing indexes was maintained in the context of foreign and domestic price movements and exchange rate movements, through use of a broad range of world-wide economic and statistical indicators. In connection with this work, officers of the Section visited posts in West and North Africa, and a number of locations in the United States where Canadian Armed Forces personnel are serving.

In the industrial prices field, development of price indexes relating to capital goods continued throughout the year. This included the pricing of new single-family dwellings erected by large builders and the specifications of important items of production machinery and equipment purchased by industry, including the collection of prices of some of the items. Exploration of new methods and sources of data for production of in-place price indexes for non-residential construction has resulted in planning of a pilot survey to test a particularly promising alternative. Experimental pricing of commodities for which there is no regular production of identical items for period to period (unique goods) continued in the areas of equipment for the generation of electricity, the fabrication of structural and plate steel and the fabrication

of pre-cast concrete. Development of a Highway Construction Price Index for Quebec is almost completed and will provide estimates of price movement from about 1963. Similar data are already available for most other provinces from 1956.

Priorities have been explored in the area of pricing outputs for service industries. This work has been done as part of a paper prepared with the Division for an international conference in 1969 dealing with the framework and classification systems for pricing service outputs; preliminary work has been undertaken in connection with developing indexes for part of the transportation industry.

A comprehensive revision of the Industry Selling Price Index relating to manufacturing industries in Canada was completed during the year, covering the period 1956-1967. The revision is the first major updating of the commodities and industries represented in the index and features: (i) the introduction of the year 1961 as the time and weight base for the index; (ii) the switch to the 1960 Standard Industrial Classification from the 1948 standard; and (iii) the introduction of an increased number of commodity indexes into the system. The revised set of indexes will also include some gross weighted indexes at the major manufacturing group level, *e.g.*, foods and beverages. A reference paper containing the revised data and an outline of the methods used in constructing the index will be available by mid-1969.

Transportation and Public Utilities Division

This Division has the responsibility to produce a comprehensive statistical program covering the fields of rail, road, water and air transport, telecommunications, other utilities and related services and industries. The Division has the additional responsibility to act as a collection agency and to provide comprehensive statistical services to many federal and provincial regulatory agencies including the Rail, Road, Water and Air Transport Committees of the Canadian Transport Commission, the Department of Transport and the Canadian Radio-Television Commission. In addition the Division has a number of co-operative collection arrangements with provincial motor carrier regulatory boards and public utility commissions.

As of April 1, 1968 the Air Transport Committee Statistics Unit, with a staff of ten, was transferred to the Aviation Statistics Centre of DBS. The Unit is gradually being integrated into the appropriate parts of the Aviation Statistics Centre, and its work is

being fully analyzed with a view to computerizing both its continuing program and predictable *ad hoc* compilations.

The Air Passenger Origin and Destination survey has been redesigned into an integrated computer system, and will be fully operative in time for the data analyses which will form the basis of the 1969 bilateral negotiations with the United States concerning the granting of international scheduled air routes. The Centre has assumed responsibility for the comparison of data exchanged with the United States Civil Aeronautics Board, since the Canadian system has facility for such analysis while that of the United States does not. Redesign of the Centre's other surveys is in progress and will be accelerated as soon as completion of the Origin and Destination system frees staff for other work.

At the end of October, a Service Bulletin was introduced to provide a much needed information service on aviation statistics. It has been well received by both the Air Transport Industry and services related to aviation.

The Centre's efforts to improve the timeliness of all its surveys have already shown good results. Reports on Level I Airports are now distributed within 45 days of month-end, with preliminary totals available through the Service Bulletin by the 20th of the month. Publication of a new Airport Activity report containing data for the period 1963 to 1968 inclusive is in preparation and release is planned for July 1969. The time-lag in the publication of the Civil Aviation monthly report has also been reduced substantially. Negotiations are now in progress to further advance the due date of returns for carriers.

A major review of the reporting schedules for *Civil Aviation* has been partially completed. Some of the schedules have been redesigned and simplified in co-operation with the industry and regulatory agencies to ease the reporting burden on respondents and additional work is continuing in this area.

In the Transportation Section considerable progress has been made in planning a new truck survey to replace the Motor Transport Traffic Survey. The new plan envisages a two part survey--a Truck Inventory and Use Survey and a Survey of Truck Fleets. The former will provide information on trucking activity generally:- total number of trucks classified by type, area of operation, annual mileage and fuel consumption. The Fleet Survey will attempt to obtain commodity origin and destination data by sampling waybills.

Major reviews of the *Passenger Bus Statistics* report and the *Warehousing* report were

initiated in conjunction with advisory committees in both industries. During the year, the feasibility of initiating an Index of Railway Freight Rates was studied with the co-operation of the Prices Division.

An important extension of the Division's coverage of water transport will be implemented this year. This is a survey of vessels operated by Canadian firms. This "inventory" survey, planned to yield details of physical dimensions, capacities, and manning, is being developed in co-operation with the Department of Transport and the Canadian Transport Commission. The basic source of shipping traffic statistics is a DBS return, completed by masters of vessels on arrival at Canadian ports. These returns yield both traffic flow and part activity statistics. The processing of these returns has now been computerized, thus enabling not only greater efficiency to be achieved but also widening the scope for further analysis of the data.

A major review of passenger-mile and ton-mile statistics published by DBS was undertaken during the year. These series are generally considered an important source for inter-modal transportation comparisons. Work so far has yielded significant improvements in the quality of both the Water and Road Transport ton-mile estimates.

Research is also being undertaken into a study of transportation as part of total Canadian expenditure on goods and services. This study will cover private and commercial expenditures on passenger and freight transportation.

On April 1, 1968, as a result of the new Broadcasting Act, the Public Utilities Section undertook a major review of joint reporting schedules for radio and television stations in co-operation with the Canadian Radio-Television Commission (formerly the Board of Broadcast Governors). These reporting schedules are being revised to conform with a uniform classification of accounts produced and distributed by the Canadian Association of Broadcasters and endorsed by the Commission. A uniform system of reporting at year-end was also established. The schedules have also been expanded to accommodate the needs of the regulatory agency which, under the new Broadcasting Act, has considerably greater responsibilities. In addition, a glossary of technical terms for the broadcasting industry was published during the year.

During the year, the results of a survey covering operating and financial statistics on the community antenna television industry were published for the first time. As the Canadian Radio-Television Commission also assumed regulatory responsibility for this industry in 1968, a co-operative collection system similar to the one for broadcasting stations is being arranged and, as the Commission's statistical needs are comparable to that for broadcasting, a major review of expansion of the reporting schedule was necessitated. For this purpose a DBS National Advisory Committee on Community Antenna Television Statistics was organized and is now in the process of developing a new questionnaire and a uniform classification of accounts to meet the needs of both agencies.

SOCIO-ECONOMIC STATISTICS BRANCH

The Socio-Economic Statistics Branch is responsible for the production, analysis, evaluation and dissemination of a broad cross-section of demographic, sociological and economic statistics derived from the households, institutions and farms of the nation. The following areas of responsibility are included: agriculture yields, production, finance and resources; censuses of population, housing and agriculture; consumer income, assets and liabilities; teachers, students, finances, facilities and services for all levels of formal education, and adult and vocational training, as well as statistics on libraries and museums; health and welfare data on births, deaths, marriages, hospitals, mental institutions, illness, crime, police, courts and penitentiaries; employment, unemployment, occupational and industrial distributions of the labour force and other national household surveys. The Branch

is also responsible for the eight regional offices of DBS and for carrying focal responsibility for provincial liaison and tourist statistics.

Agriculture Division

The Agriculture Division is responsible for development, operation and co-ordination of statistical systems which provide intercensal estimates of producing units--acres and livestock numbers, production, utilisation, value and prices of farm commodities, farm wage rates, farm expenditures and receipts, farm capital and debt, physical volume of output, domestic consumption of food, farm inputs and physical productivity factors, farm practices and indexes of farm prices. Data are

collected directly from farmers and agricultural industries, chiefly by means of mail questionnaire surveys on a sampling or partial coverage basis. Arrangements are also made to secure data from administrative sources.

The agricultural statistical systems is conducted in close co-operation with provincial government departments with which the Division has joint surveys and other work-sharing arrangements. There is also close collaboration with agencies such as the Canada Department of Agriculture from which administrative statistical data are procured.

Besides maintaining a flow of data related to agriculture, the Division is active in devising improved data collection procedures to meet the rapid changes in the structure of agriculture and allied industries and to fulfil demands for new, more timely and better quality data. Major stress is also being placed on efficiency of data handling and storage. To achieve these improvements, the Division is undergoing a reorganization in which more emphasis will be given to electronic data processing and improved methodology in collection of data. At present, the Division is organized into the following four sections: Crops, Livestock and Animal Products, Farm Finance, and Special Projects and Research.

The Crops Section conducts regular and special purpose surveys and publishes timely statistics and market information on field and horticultural crops for Canada, and by provinces. In the Crop Reporting Unit much of the data on the principal grain and oilseed crops is collected largely by means of mailed questionnaires from a special corps of volunteer farm correspondents, seeking information on such topics as growing conditions, acreages to be planted, fertilizer use, probable yields, farm-held stocks of grain, prices received by farmers and crop production. These statistical systems are designed to meet the information requirements of farmers, marketing agencies and allied industries; in addition, the annual field crops program provides a vital year-to-year link with the decennial and quinquennial Census of Agriculture benchmark statistics. Although published reports usually refer to provincial totals only, the data for many items are tabulated by smaller geographic areas and made available to provincial authorities.

Data obtained from these farm surveys are integrated with a vast array of statistics emanating as by-products of the operations of the Canadian Wheat Board, Board of Grain Commissioners, trade groups such as the National

Millers' Association and several government departments to provide continuous studies of the supply movements and trade of Canadian cereals, feed grains and oilseeds. An agriculture reporting program relative to world trade in grain and oilseed crops is maintained through the co-operation of the Canadian Trade Commissioner Service in order to provide a better assessment of Canada's position in the international trade of these commodities as well as of new and changing policies affecting this trade. Recent steps have been taken to improve and expand this program of foreign crop reporting. The reviews based on the analysis of domestic and foreign markets for grains and oilseeds are set forth in two comprehensive publications *The Wheat Review* and the *Coarse Grains Quarterly*. Monthly surveys of the grain milling and oilseed crushing industries are carried out as part of the overall domestic situation for grains and oilseeds. Expansion of data in the area of oilseeds and fats and oils has continued. A complete review of all aspects of Canada's grain trade is set forth in the annual publication *Grain Trade of Canada*.

In addition to an extensive publication program, numerous research studies were carried out to meet the economic and statistical requirements of both the government and private sector. The monthly survey of seed processors, established in 1967, was contrived to collect data in regard to seed purchases, and inventories on hand. This series provides an indispensable check on production of these crops as well as a picture of marketing patterns. In an effort to obtain more information at the farm level, an enumerative sample survey was carried out by direct contact and a random point system in the Peace River area to establish acreages of the different crops grown. The Seed Unit also initiated a special survey of mustard seed growers along with continuing the regular survey of seed corn sales.

The Special Crops Unit is responsible for statistical and subject-matter output systems relating to horticulture crops, honey and maple products on a national and provincial basis. The area covered ranges from the most extensive form of agriculture, *i.e.* beekeeping, to the most intensive form, *i.e.*, the greenhouse industry. In the Unit, large volume mail questionnaire surveys form an essential part of the data collecting systems. However, mail questionnaire surveys do not provide unbiased data that can be used for testing the objectivity of the response on the part of the respondents. Accordingly, systems to test quality are necessary and are being designed. In recent years, objective random sample surveys involving statistical and biological variables have been used in forecasting the peach, grape and sour cherry crop in Ontario and the

apple crop in British Columbia. Results obtained from these objective estimating surveys show that, for the most part, the techniques are quite satisfactory. However, some changes are always necessary so that maximum efficiency can be obtained. At the present time research is under way in these estimating areas and the operating procedures will be varied somewhat in 1969.

The Survey Research Unit is associated with most of the development work undertaken in the Crops Section involving the application of probability sampling methods. During the year 1968-69 the existing regular programs in this field were expanded and some have become part of the operating tools of the Division. The Survey Research Unit has been active also in fostering the interchange of statistical information with provincial agricultural statistical offices; a one-week course of lectures and seminars was arranged for the staff members of the Ontario Department of Agriculture's Statistical Branch, during the late summer of 1968.

The regular operating program of the Livestock and Animal Products Section includes the publication of a series of monthly, quarterly, semi-annual and annual reports related to the Canadian livestock industry. Monthly reports provide data on stocks of principal food commodities in storage in Canada, the output of dairy plants and estimates of farm value and production of milk and eggs. Quarterly reports are limited to the swine industry showing quarterly estimates of farm inventories, farrowings and expected farrowings. The semi-annual reports cover farm inventories for all livestock except fur-bearing animals for June 1 and December 1. Production, disposition, trade and other related data for all livestock and animal products are covered in the annual reports of the Section. Efforts during the year have been directed toward improving quality, timeliness, and extending the scope of existing projects. In the area of cold storage statistics, an evaluation of output was undertaken and will continue throughout the coming fiscal year. Results to date have permitted the Section to discontinue publishing series on stocks of shell eggs and stocks of all commodities in transit and in nine cities. Economies effected have allowed the Section to undertake an intentions survey to meet the changing needs of the produce trade. The intentions survey will be quarterly and will provide data on quantities of whole turkey carcasses in cold storages being held for further processing. The first survey will be conducted early in the coming fiscal year.

Preliminary estimates of farm inventories and pelt production of ranch-raised mink were released six months prior to the publication

of the final report. The preliminary estimates differed from the final estimate by approximately one per cent. During the past fiscal year, Newfoundland was included in the monthly survey of egg production for the first time and monthly estimates have been available since October, 1968. Studies have been undertaken to devise methods to extend survey coverage to the swine and dairy industries of Newfoundland. Exploratory work in the application and integration of probability sampling into regular estimating procedures continued throughout the year. The Alberta cattle on feed survey, which was undertaken on a pilot project basis in January 1968, was repeated in July 1968 and January 1969. The technique used for generating estimates has been tested to the Division's satisfaction and plans are well developed to extend the survey to the remaining major cattle-feeding areas of Canada during the coming fiscal year. The same technique used for generating estimates for the cattle on feed survey was tested for hog farm inventory and farrowing estimates in Ontario and for numbers of laying hens and egg production in Nova Scotia. The samples for these surveys were randomly selected from list sample frames; the collection vehicle was the voluntary response mail questionnaire. It is planned to field test the impact of non-response on this estimating procedure.

Feasibility studies conducted during the past year indicate that the application of electronic data processing methods will permit the integration of this estimating procedure into the regular estimating program. Plans are well advanced to introduce electronic data processing to the Section's regular data handling problems which will facilitate the integration of new and conventional estimating techniques.

During the fiscal year 1968-69, the Farm Finance Section continued its regular program of activities dealing with development and operation of a statistical system for the collection, compilation, analysis, evaluation and publication of provincial statistics on farm income, expenditures, prices, capital investment, productivity, land values and wage rates. This system was developed to provide regular detailed estimates of financial and economic developments within the agricultural sector of the economy for use in measures of the total economic activity of the nation for governmental and industrial planning and policy decisions and economic research.

Non-current activities during the year included the revision of farm income and expenditure estimates for the intercensal period 1961-1966. These will be published in the spring of 1969 as part of the regular farm income releases and will serve to up-date the

present handbook of farm income. The conversion of the index numbers of farm prices of agricultural products from a weight and time base of 1935-39=100 to a weight base of 1960-62=100 and a time base of 1961=100 was continued during the year with completion now scheduled for mid-1969. A special mail questionnaire survey was conducted in the Prairie Provinces in June to provide basic data required for estimating farmers' seed costs for wheat, oats, barley and forage crops. During the year, the Farm Finance Section became involved with the Regional Statistics staff in a project designed to provide farm income and expense data on a small area basis. Many problems were encountered and it is expected it will be some time before satisfactory results are obtained. Over a year ago, a special survey was conducted to collect farm land values to supplement data collected by means of a regular annual survey taken in December. At the present time, the results from this special survey and the regular survey are being correlated and analysed in the light of information collected by the Census of Agriculture, with a view to developing data of sufficient quality for publication.

An experimental program was launched in the latter part of the year to develop more timely estimates of farm income for inclusion in the estimates of National Accounts and Industrial Output. These experiments have been successful in producing results within one-half of the normal time required for their production. Further experimentation will be carried out in the coming year in an attempt to reduce still further the time required to produce these estimates.

The Special Projects and Research Section has been involved in developing improved sampling frames for divisional surveys and participation in pilot surveys in the field to test new methods of collection and planning for computerization of divisional data. Pending reorganization of the Division, the Chief of the Section has been given responsibility for the development of questionnaires and tabulation of the major June and December crop acreage and livestock surveys. The Section works closely with the Operations and Systems Development Branch and is the focal point for computer jobs originating in the Division. During 1968-69 swine and poultry surveys in several of the provinces were redesigned. This involved selection of probability samples from the master computer list of farmers' names. The Section also took an active part in developing methods to computerize the data from livestock surveys. A study to place the major surveys of the Division on computer is continuing. Field work for a test project in

area sampling for crop, livestock and financial data was under the direction of an officer of the Section during 1968-69.

A major review of the questionnaires for the major crops and livestock surveys was undertaken in 1968-69, which resulted in deletion of some questions. Associated with this review was a study of editing procedures. New simplified procedures will go into effect in 1969-70 and, together with partial automation, improvement in timeliness and overall efficiency is expected. These developments of procedural standardization and simplification will facilitate the eventual computerization of survey results.

Census Division

During the year, increased emphasis was placed on the planning and preparations for the decennial Censuses of Population, Housing and Agriculture in 1971. To this end, the Division itself was undergoing an extensive reorganization during the year to be better equipped to plan and manage this vast operation which reaches into every Canadian home and employs at its peak period an army of some 40,000 workers. Briefly, this realignment of functions within the Division has been undertaken with the primary objective of creating organizational units specifically responsible for each of the major components of the statistical process and for ensuring their co-ordination. Thus, for example, operational pressures and responsibilities on professional subject-matter staffs are being reduced by the creation of a Systems and Operations Subdivision, thereby enabling the former group to exert a much larger role in the analysis and interpretation of census statistics and in the research and study essential to the development of concepts, content, and tabulations. In summary, the reorganization is one which attempts to clarify and separate responsibilities for administration, systems and operations, subject matter, the co-ordination of research activities, and the provision of more direct support to the Director of the Division.

Perhaps the most far-reaching developments in the plans for the 1971 Census advanced during the year were those concerning the introduction of new field methods and techniques, as well as the provision for more extensive sampling in the collection of the basic data from householders. The degree to which sampling can be employed in a national census has a direct bearing on efforts to reduce cost and to produce more timely results. The introduction of new field methods has as its main objective the provision of data of

better quality through the use of "self-enumeration" techniques. While some loss of quality due to sampling is inherent for small-area data, the use of self-enumeration questionnaires will compensate for this factor by reducing the amount of response error found in earlier censuses. Thus, taken together, they appear to offer the best combination for achieving the basic aims of the Census in terms of cost, quality, and timeliness of the data.

The series of Census field tests starting with a small pre-test in Ottawa in December 1966, and an ensuing complete test enumeration of the City of London in September 1967, was followed up by a rural test in four representative localities across Canada in October 1968. All were designed to investigate the merits of new field methods and techniques for the 1971 Census. In the first two tests, use was made of new techniques along lines similar to those developed earlier in the United States to obtain the advantages of self-enumeration by mailing out the questionnaires to all householders for their completion and mailing back to a central processing office. In the rural test of 1968, a combination of direct interview methods and enumerator "drop-off" and "pick-up" of questionnaires was employed.

As a result of the testing program to date, the final "dressrehearsal" test of methods and questionnaires planned for the fall of 1969 will employ in all areas a uniform system of household listing and drop-off of questionnaires by enumerators as the method of getting the Population and Housing documents into the hands of householders ahead of the Census date. The most feasible plan of return appears to be for householders in the larger urban centres to mail back their completed questionnaires under a decentralized approach, while in rural areas the enumerators will pick up the completed forms. Enumeration of the large agriculture questionnaire will be included in this "drop-off-pick-up" method in order to obtain the benefits of self-enumeration in so far as possible from farming enterprises.

One of the first decisions which must be made in the planning of a Census involves the content (inquiries, concepts and definitions) to be included in its coverage. Subject-matter subcommittees and work groups have been engaged in this aspect of the 1971 plans since the first field tests began. In addition, a special test of content was held in Toronto in May 1968 when alternative drafts of proposed Census questions (particularly relating to labour force inquiries) were tried out using two small samples (each of approximately 3,000 households). Both the testing

program and the investigations of the various subject work groups were designed to elicit information not only as to the usefulness of various proposed subjects of inquiry, but such considerations as their relative costs, the work loads imposed on respondents, and their ability to provide meaningful answers to complex inquiries, had to be taken into account as well.

Leading up to their final recommendations on the content of the population and housing questionnaires for the 1969 "dress-rehearsal" test, Census work groups worked closely during 1968 with representatives of other federal departments and agencies. Submissions were canvassed and received from provincial statistical agencies. Briefs and suggestions were received also from a number of non-governmental groups and agencies drawn from such sectors as the business and industrial community, universities and town-planning agencies. For the Census of Agriculture, content plans began in 1967 with the formation of a federal interdepartmental committee. During early 1968, meetings were held with provincial representatives in each province and some university users. Further meetings were held with the federal Department of Agriculture and the Statistical Committee of the Farm Equipment Institute. All suggestions were reviewed by the interdepartmental committee, and a questionnaire was drawn up for the testing program in the four rural areas across Canada in October 1968. It is expected that this questionnaire will be substantially the one used for the "dress-rehearsal" test in 1969.

Changes in content planned for the 1971 Census as compared to the previous decennial Census of 1961 result mainly from demands for more details within the framework of existing subject fields rather than for new areas of inquiry. On population, for example: the questions on education have been expanded to include vocational and occupational courses in addition to those on academic schooling; net income of persons operating farms has been added to round out the data obtained from persons receiving income from non-farm sources; a question on language commonly spoken, recommended by the Royal Commission on Bilingualism and Biculturalism, has been added to those of mother tongue and official language; transportation agencies and town planners have emphasized the importance of a question on address of place of work to determine relationships between where people work and where they live. On the housing questionnaire, changes include: more detailed questions on the subject of rents, particularly on the extent of subsidized rentals; the types of fuels used for cooking and water heating, in addition to home heating; the incidence of vacation or second homes.

In the Census of Agriculture, one general questionnaire is planned for 1971 rather than four as in 1961 (*viz.*, the general questionnaire, an irrigation questionnaire, a questionnaire for forest products on farm woodlots, and one for the enumeration of agriculture on non-farm holdings). Irrigation questions will form part of the general questionnaire in 1971, as will forest products on a reduced basis. The questionnaire on non-farm holdings will be dropped since their importance is now negligible. New items will include basic information relating to the use of fertilizers and sprays, while additional farm machinery and equipment items will be listed. Included in the testing program are questions which attempt to classify the part-time work of farm operators by kind of work done, and to classify paid agricultural labourers as either paid by the week, day, hour, or piece rates.

At the close of 1968, planning activities for 1971 relating to the vast array of tabulations and cross-tabulations involved in a national Census had only just begun. For this purpose, the tabulation program of the previous Census is first evaluated in the light of its adequacy based on such factors as known deficiencies resulting from unfulfilled demands of users in relation to their requirements for special data, and suggestions received in the intercensal period for enlargement or broadening of various aspects of the tabulation program. For the 1971 Census, a great deal of emphasis will again be placed on meeting the increasing needs for small-area data, while at the same time recognizing the ever-widening scope of research requirements for more complex tabulations on the part of social and economic planners.

The Geography Section continued preparations for the 1971 Census cartography by implementing the Census Rural Official Map program (CROM), with completion data scheduled for mid-1970. Verification of municipal boundaries on topographic maps has been performed and extensive correspondence was carried out with municipal and provincial authorities in order to clarify particular boundary problems. In co-operation with the provincial authorities of British Columbia and Newfoundland, revision of the census division boundaries is being carried out. The Geography Section, with the Census Metropolitan Area Subcommittee, are revising the Census Metropolitan Area concept to approximate the labour-market area. Included in the 1971 Census will be a question on place of work. A Place-of-Work Subcommittee was created and a survey was taken of the censuses of other countries as to their methods of asking the question.

Mention should be made in this latter connection of the experiments conducted during 1968 in the field of geographical reference

systems or geocoding. This refers to the assignment of geographic location codes to computer tape records by which each code is essentially a co-ordinate which identifies a well-defined spatial location. Based on geocoding, computer program may be written which will retrieve data for any combination of such locations. Thus, data can be retrieved automatically for a variety of specified areal units, and the user need not be constrained by a pre-determined set of areal units which may not suit his special needs. It is hoped that this facility, now in its experimental stages, will be operational for certain key cities in the 1971 Census based on the assignment of codes to individual street addresses, and an alternative form of geographical referencing based for the most part on the assignment of a geographic co-ordinate identification to enumeration areas (EA's) for all areas not included under the 'street address' conversion program.

Another important development which was further advanced in 1968 involved the possibilities for linkage of the population and agriculture questionnaires of the 1971 Census. Traditionally, the Census of Agriculture provides agricultural data for census-farms, and only a limited amount of data for the farm operator and family. In recent years, agriculture policy has been aimed more at the commercial sector of agriculture and there has been a growing awareness that these policies have not provided much help to the small non-commercial operator. The result has been that the census organization has not only had a continuing demand for agricultural data for commercial farms, but a growing demand for population-type data for non-commercial farms. For example, information regarding age, education and source of income, of the operators of small holdings has been urgently required to plan and administer the numerous rural poverty programs that are now in operation or are being planned. With the advent of computer processing, it is now possible to link the records of the two censuses, and despite a number of operational problems, an attempt will be made to provide a good deal more useful population data regarding farm people than has been provided in the past. It will also be possible to utilize important information relating to the economic characteristics of farm people that will be enumerated on the population document, *e.g.* non-farm income and the occupations of part-time farmers.

In addition to the detailed planning for the 1971 Census as described in the preceding paragraphs, numerous routine activities of the Census Division continued throughout the year. The number of requests for evidence of proof-of-age by reference to early census and national registration records amounted to 52,000. Extensive correspondence was carried on with

departments of governments, universities, commercial concerns, and individuals across Canada, in answer to requests for census data. Current statistics on citizenship, immigration and hospital medical insurance were processed and updated to meet needs and requests arising in the Population Estimates and Projections Section. The revised population projections were made available to several government departments, and consultative services regarding projection work were provided to federal and provincial government departments. The regular series of quarterly and annual population estimates and of Canadian citizenship were prepared for publication. Significant progress was made in the new population projections program. National and provincial projections were revised in the light of the 1966 Census and the new DBS 1969 population projections were initiated.

The processing and production of 1966 Census reports continued with the release of four reports on population characteristics, six on household and family classification, five on geographical characteristics, and twenty-eight in the Census Tract Series. Monographs based on the 1961 Census were published on the following subjects: *Provincial Differences in Labour Force Participation*, *Unemployment in Canada*, *The Female Worker in Canada*, *Tendances et facteurs de la fécondité au Canada*, and *Incomes of Canadians*. Further, the Division edited and issued nine Census Technical Memoranda.

Detailed comments and suggestions on the final draft of the *Canadian Classification and Dictionary of Occupation* (CCDO), which will reflect the latest changes in occupational structure and will permit interdepartmental comparisons of occupational data, were provided to the Central Classification Research and Development Staff of DBS and the Occupational Research Division of the Department of Manpower and Immigration. The CCDO will be used by this Division to classify occupational responses in the 1971 Census.

Various members of the professional staff represented the Division and the Bureau at a number of international and national meetings held throughout the year. These included the Population Association of America, Canadian Economic Association and the Canadian Conference on Housing. Numerous meetings were held with various "user groups" representative of federal, provincial and municipal government departments, professional and academic associations and planning boards to discuss 1971 Census plans, particularly on matters of questionnaire content and tabulation.

Consumer Finance Research Staff

During the 1968-69 fiscal year, the 1961 Census monograph *Incomes of Canadians* was published by the Queen's Printer in English. A French translation has been made of the monograph but it has not as yet been submitted to Queen's Printer.

The report of the results of the 1966 Survey of Consumer Finances was published. Farm households and farm income were included for the first time in this series of surveys so that income distributions were published for all families and individuals, and not restricted to the non-farm population as in previous surveys. However, the report also contained statistics on the non-farm incomes so that users could make comparisons with earlier survey data on a consistent basis.

The 1968 Survey of Consumer Finances was conducted in April 1968. Statistics on income and on other economic and demographic characteristics such as age, labour force status, occupation, industry, education, and work experience were collected from five-sixths of the April Labour Force Survey, or from approximately 30,000 households. This was the largest such intercensal survey undertaken by DBS. Preliminary results of the survey are expected to be released by mid-summer 1969, and the full report in the latter part of the 1969-70 fiscal year.

Since four-fifths of the income sample were also included in the annual Household Facilities and Equipment Survey, the data in the two surveys are being linked and a special report may be issued on housing characteristics.

A questionnaire has been designed for the April 1970 Survey of Consumer Finances and the survey itself will be pre-tested in May, 1969. This survey will be one of two major household surveys to be carried out in 1970, the other being a Family Expenditures Survey which will be undertaken in March, 1970. Both surveys will be national in scope and will include farm households as well as non-farm households. The Consumer Finance Survey will interview 12,000 households. Although the two surveys will not sample the same households, both questionnaires will contain a common core of questions - amount and sources of income received in 1968 as well as information on the demographic and other characteristics of the family unit. The Family Expenditures Survey will focus on income and expenditures while the Survey of Consumer Finances will collect statistics on income, balance sheets and net worth. Discussions are being held with interested users within the federal government, in provincial governments and elsewhere, such as the universities, to solicit comments on the contents and analysis of the data. Questionnaires will be finalized by mid-year.

A historical report on family and individual income statistics was completed for selected years from 1951 to 1965. The report has gone to printing and is expected to be released within two or three months. In addition to income distribution statistics for family and individual characteristics such as age, and employment status on a current dollar basis, the report will contain constant dollar series expressed in 1961 dollars as well as statistics on the quintile composition. The report will be entitled *Income of Non-Farm Families and Individuals in Canada, Selected Years, 1951-1965*. A translation of the report will make income distribution statistics available in French.

A number of research papers were worked upon during the year. A paper on *Problems of Defining Low Economic Status for Poverty Studies* by G. Oja was published in the September 1968 *Canadian Statistical Review*. A paper comparing Canadian-American income distributions has been nearly completed and will be presented at the International Conference on Income and Wealth to be held in Israel, August, 1969. Work progressed on a number of evaluations of census and survey statistics and papers are expected to be completed within the coming year.

Work progressed on income estimates for counties and census divisions. The work has been held up because of staff vacancies but it is hoped that results for a number of years starting with 1961 may be available during the coming year.

The staff participated very actively in the planning of the 1971 Census of Canada and the various census tests as well as the evaluative studies. The staff participated in other DBS internal working groups such as the committee considering the historical revision of labour income estimates and was represented at a number of federal-provincial conferences. The staff provided specialized data and consultative services to a number of other government departments, such as the Department of National Health and Welfare. The Co-ordinator assisted the Economic Council of Canada in the preparation of its Fifth Annual Review. She also represented the Government of Canada at a meeting of technical experts held by the Organization for Economic Co-operation and Development in Paris in April 1968, called to discuss the measurement of changes in national levels of living.

Education Division

The Education Division is responsible for the collection, interpretation and analysis of statistics on education, both public and private, at all levels. It gathers and publishes data and information on pre-school

kindergartens, elementary and secondary schools, universities, other post-secondary institutions and on adult education. In addition, the Division accounts for the costs of education and the sources of income.

Since education is a provincial responsibility, the Division works through the provincial departments of education in the collection of data on public elementary and secondary education and on the provincially-controlled community colleges of various types as well as the provincial trade schools. In general, the Division collects data directly from private schools of all kinds and from universities and colleges.

In addition, the Division acts as a service bureau for some of the smaller provinces providing them with tabulations on schools, teachers and pupils as required for administration and for publication in their reports.

During the post-war period, education enrolments in Canada have increased more rapidly than in any other industrialized country in the world. Since 1951-52 elementary and secondary school enrolment has more than doubled, university enrolment has more than quadrupled, and new post-secondary non-university institutions have developed, enrolling about 75,000 full-time students.

One quarter of the population of the nation is involved in education either as students, instructors or ancillary staff. The total student population of nearly six million approaches the total number of persons in the labour force and the total expenditures of \$5.9 billion is 9 per cent of the Gross National Product. Expenditures have more than doubled since 1962.

At their meeting in September 1964, the then Standing Committee of Ministers of Education (now the Council of Ministers of Education), agreed to the appointment of an *ad hoc* Ministers Information Systems Committee (MISC) made up of a representative appointed by each Minister plus a representative from the Dominion Bureau of Statistics. Its purpose was to proceed toward the development of a national information network for education, an education data system using modern electronic data processing equipment, to serve the needs of the federal, provincial, and municipal authorities.

Limiting itself first to public elementary-secondary education the *ad hoc* committee aimed at the creation of data banks on administrative personnel, schools, teachers, pupils and financial data. Sub-committees were appointed to agree on and propose lists of items to make up the record for each one of these units. Members of the Education Division were

represented on MISC and actively participated in the work of these subcommittees. This phase of the project was accomplished by the summer of 1968.

In September 1968 the Council of Ministers asked the Dominion Bureau of Statistics to take over and develop the project from there on, in co-operation with the provinces. This task was accepted and it is expected that the work of further development will begin in the coming fiscal year.

During this last year the association of presidents of the Ontario Universities appointed a committee of university officials involved with student registration to study and report on the possibility of a data bank on university students. Quebec universities under the leadership of the provincial Department of Education are headed in the same direction. The Education Division is keeping in direct touch with this movement in both provinces.

Heretofore data collected by Dominion Bureau of Statistics on the public school teachers of the eight co-operating provinces has been largely, and in most cases, exclusively what Dominion Bureau of Statistics required. During this last year, for three provinces, a detailed teacher record has been designed to serve the data needs of the department of education, teachers' and trustees' associations and Dominion Bureau of Statistics. For two of the provinces, New Brunswick and British Columbia, these records will be processed in the Bureau but computer output in the form of duplicate tapes, print-outs and frequency distributions will be made to the departments of education and the associations involved. As for the third province, Alberta, the teacher records will be maintained and processed in the department of education and duplicate computer records will be transmitted to the Dominion Bureau of Statistics.

In the previous year, individual reporting on pupils withdrawing from school was in operation in four school systems - Nova Scotia, New Brunswick, Indian schools and schools in the Northwest Territories. During this last year this was extended to include Prince Edward Island. In all cases the returns are being processed by the Education Division.

With the appointment of a new chief of the Higher Education Section has come some reorganization of the personnel and work of the Section together with some increase in staff. As a first priority every effort has been made to bring the publications up to date. This has been successful to the point where 1967-68 surveys are either already published or are with the printer and 1968-69 surveys are all in preparation.

At the request of the Science Secretariat of the Privy Council, a survey of university teachers was undertaken. This included such information as institution and province, sex, discipline taught, rank and highest degree held. The data covered a series of years. The survey was completed and the information transmitted to the Secretariat.

Vocational education at the post-secondary level is increasing by leaps and bounds. Community Colleges, under various names, are being established in all provinces. For example, the eleven *collèges d'enseignement général et professionnel* (CEGEP) existing in Quebec in 1967 increased to twenty-three in 1968 and seven more are projected. Not only are the community colleges offering technical courses but many of them are also offering academic courses leading to university. Enrolments are rapidly increasing. Trimester systems or modified trimester systems are being adopted. The schools are assuming responsibility for training, formerly given elsewhere, such as teacher training and nurses' training, and agreements are being worked out to share programs with other institutions.

During the year agreement was reached with all provinces except Quebec for the Dominion Bureau of Statistics to collect statistics directly from the institutions and provide the provincial authorities with duplicate reports. In Quebec, the Department of Education collects directly from the schools and passes on summarized information to DBS. Also, meetings began with the Canadian Commission for Community Colleges to agree on an expanded program of statistics to be collected from the institutions. During the year a brochure was prepared listing the institutions and the courses offered in each. This brochure has enjoyed a strong demand from counsellors and prospective students.

In collaboration with the Canadian Nurses' Association, the Vocational Section carried out a survey of the qualifications and salaries of the teaching staffs of nurses' training institutions and was requested to carry out a survey of characteristics of nurses holding university degrees.

In co-operation with the Census Division in preparation for the 1971 census a code for vocational courses offered was drawn up, so that the courses can be meaningfully related to occupational groupings.

New working arrangements for the reporting of annual statistics on apprentices were developed with the provincial directors of apprenticeship, and at the annual meeting of the Canadian Vocational Association, a committee, including a representative of DBS was appointed to devise a classification system for

designated apprenticeship trades for interprovincial use.

Due to staff vacancies over an extended period, data on adult education is incomplete for 1965-66, 1966-67 and 1967-68. It is the intention to prepare a combined issue of data collected on these three years. During the last three quarters of the year there has been a reassessment of the work of the section in the light of an obvious need to extend coverage to include areas of adult education which have been developing significantly over the past few years.

Consultations have been taking place with officials of community colleges, university extension, professional continuing education, basic adult education, agriculture and health education as well as community and voluntary associations.

Despite lack of an officer in charge, library statistics have been kept up-to-date. At the end of the year, consultation was in progress with the Statistics Committee of the Canadian Library Association with a view to revising the statistics collected on public libraries.

In view of the quadrennial international conference on correspondence education to be held in Paris in May, 1969, a survey of correspondence education in Canada was undertaken. A preliminary release is in preparation for the Paris meeting and a final report will follow.

A very important element in the education system is the training of teachers for elementary and secondary schools. This training is provided by university facilities of education in all provinces, by teachers' colleges in three provinces and as part of the *collèges d'enseignement général et professionnel* of Quebec. A survey of characteristics of the teaching staffs of these institutions was undertaken during the year. The characteristics include, among others, age, sex, marital status, country of birth, academic rank, tenure, academic and professional degrees, country where trained, teacher certificate and work experience. All data has been collected and almost all print-outs of tabulations have been received but preparation of the report has been deferred because of a more important study.

In 1967-68 government loans to universities and other post-secondary students amounted to \$57.3 million and has been increasing for the last three years at an average of over \$10 million. It is obvious that expenditures of this nature and size should be based on a background knowledge of the income and expenditures of all post-secondary students. No such study had been made since 1965 and this was limited to university students.

In the fall of 1968 the Bureau was asked by the Department of Finance and the officials of the provincial governments responsible for student loans to carry out a study of the income and expenditures and related information of post-secondary students. The related data included such items as study program, citizenship, age, sex, marital status, mother tongue, home residence, transportation, some information on parents and, where applicable, on spouse. A sample of 31,500 students was selected, one tenth of the total student population. Questionnaires were sent out in February. Print-outs of the first tabulations are expected in the fall of 1969.

Growth and development in education are vital to the future development of the nation. Consequently, it is necessary to forecast the future, given the trends of the past and considering the probable effects of present policy and future plans. At the request of the Economic Council of Canada, the Estimates and Analysis Section of the Division spent the last six months of the year assembling historical data on enrolments at all levels of education, analysing these data and projecting the various enrolments on to 1975 and 1980 and showing the changes that are expected to take place in the relation between enrolments and relative population age groups. This study will continue for some time into the next fiscal year. The Estimates and Analysis Section also prepared, for the Department of Finance, projections of the cost of post secondary education to 1972 by type of institution and by province.

In an effort to provide statistics that are as current as possible estimates of numbers of schools, teachers and enrolment for all types of schools and all levels of education, were prepared for the academic year 1968-69 and published the first week in September. This proved so popular that a reprint was necessary.

Special reports on education finance were prepared for UNESCO and for OECD. The latter required historical data for a 15-year period.

For the first time, the form for the financial report of private schools was divorced from the section requiring non-financial data on the grounds that they are filled in by different individuals. As a result, reports on teachers and enrolment came in very well, while the response on financial data has been less than satisfactory.

The basis for financial data on universities and colleges are the reports of the institutions represented by the Canadian Association of University Business Officers (CAUBO).

In November 1968, the Dominion Bureau of Statistics participated in a meeting of a committee of CAUBO which initiated major changes in university financial reports and in definitions and instructions. In addition, discussions have begun on the possibility of collecting budgets in order to markedly improve on the timeliness of data on university finance.

Considerable time and effort are being devoted to the development of a reporting system of financial statistics of post-secondary non-university institutions. Many of these institutions come directly under provincial government control. Agreement in principle has already been worked out with the responsible provincial officials in Ontario and Quebec to secure consolidated figures on the Colleges of Applied Arts and Technology in Ontario and the *collèges d'enseignement général et professionnel* in Quebec.

Special enquiries for financial data requiring special tabulations increased by close to 30 per cent over those of the previous fiscal year.

Health and Welfare Division

This Division is responsible for the production of statistics on the state of health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Four sections share the responsibility for producing statistics on health. The Vital Statistics Section is concerned with the events of birth, death, marriage and divorce. In particular, it carries out studies on natality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in general and special hospitals and in tuberculosis institutions. It is also concerned with the incidence of a number of communicable diseases. The Mental Health Section, which was formed last year, is responsible for patient characteristics and patient movement as these relate to mental disorders and psychiatric facilities. The fifth section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions, the Penitentiary Service and the National Parole Board. The Division also conducts non-repetitive special investigations, e.g. medical care. It also plans to extend economically its coverage of the areas assigned to it; in the past year officials of the Division, separately and in company with an officer of the National Cancer Institute of Canada,

visited the provincial cancer registries to make arrangements for a modest program (capable of expansion) to report particulars of each new case of cancer commencing on January 1, 1969.

The Division met its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports, and by supplying the provinces with basic tabulations for births, still-births, marriages and deaths, as required under federal-provincial agreements. Throughout the year demands for information continued at the high level that has been reached for the past few years. These demands have come from public health officials, education authorities, individuals engaged in medical research, manufacturing and distribution firms, market research agencies and other government departments, as well as from the public at large. Many of these demands represent requests for detailed analyses of current and historical records. More frequent this year than ever before have been requests for intensive investigations of the patterns of nuptiality and fertility. These latter requests have been occasioned by the recent drastic changes in the birth and marriage rates in recent years. New developments in hospital and medical care have added to the already considerable flow of demands for information on mortality due to particular causes. Most of these varied special requests required special calculations and compilations, as the information demanded was not available in any published form.

To meet these and a number of other demands at once, as well as at the same time satisfying special interest groups, several analytical studies have already been published and others planned. These studies relate to cancer, accidents, heart disease, foetal and infant mortality, nuptiality, fertility and life expectancy, and deal with the latest trends in these areas, seeking to elucidate factors associated with the direction and magnitude of the trends. Besides a planned special life expectancy study, a series of annual life tables is being initiated, to serve as a general reference for those interested in survivorship, and for government and other bodies responsible for long-term projections and planning. These reports and studies have been supplemented by a series of technical reports which deal with methodological techniques of life-table construction, statistical measures of trends, and techniques for projections of births, marriages and deaths. In addition, calculations on 15-year projections of births, marriages and deaths were initiated as the base for population projections for demographic and economic planning purposes. The division also collaborated in methodological

studies relating to inter-censal estimates of population.

In order to meet the needs of subject-matter specialists and epidemiological researchers, and to accelerate the publication of current data, the release of three separate annual reports, each dealing with births, marriages and deaths to replace the present combined report, was planned.

Since 1945, the Division has been preparing alphabetic registers of births, marriages, and deaths on behalf of the provinces and the Family Allowances Administration. Since this is not a purely statistical function some consideration is being given to having these functions carried out by some other body, or alternatively reviewing the need and method for some alternative verification system.

Processing of vital records in the Bureau is an expensive and lengthy process. Economies have already been realized by making arrangements with the five largest provinces to share with them the cost of producing basic statistical records, thus necessitating standardization of certain statistical procedures. Further economies, and even more complete co-operation with provincial authorities are being effected through computerization. To advance publication dates, to provide accelerated service to the provincial governments and to meet pressing demands for new statistics, the complex and detailed series of annual death tabulations are being fully computerized. Pending the availability of additional computer resources and the preparation of new computer programs a general-purpose program is being utilized in the meantime for some statistical series, notably births and marriages.

Negotiations and discussions with provincial authorities are progressing regarding standard classification of local geographic areas so as to permit grouping of local area statistics for population projection and short- and long-term planning for such other purposes as education, economic, market- and social-research.

Arrangements were made with the Department of Justice for the collection and compilation of statistics on divorce under the new Federal Divorce Act which came into effect July 2, 1968. In addition to new information on grounds for the divorce action, the system will provide much more extensive information regarding the characteristics of the parties to the divorce, the number of dependants involved and other statistics than has been possible to compile in the past.

A new decennial revision of the International Classification of Diseases, which

is sponsored and published by the World Health Organization, was put into effect in Canada for the classification and publication of the official statistics on causes of death effective January 1, 1969. The introduction of the new classification necessitated intensive training of provincial medical coding personnel and the resultant modification of mechanical tabulation and other procedures.

Massive punch-card record files covering births, marriages and deaths registered since 1925 are progressively being converted to computer tape for convenience of security storage, the preparation of verification listings, if required, for Family Allowances or provincial administrative purposes, for the preparation of special statistical tabulations and for record-linkage purposes.

Each year the Division provides the Vital Statistics Council for Canada with its secretariat service. In addition to work immediately associated with meetings of the Council or of its committees, the secretariat service is usually involved in the examination of a number of problems designated by the Council. Some of these problems relate to legal and administrative features of the vital statistics system, while others extend to the general sphere of social statistics. As an illustration, the Secretariat made arrangements, on behalf of the Council, for a full investigation and redesigning of the present registration forms used by the provinces, involving collecting views, summarizing opinions, and circulating results to all Council members. One of the objectives of this investigation was the standardization of content, size and format of the records used by all the provinces, subject to local legal requirements where some variation is inevitable. Since the records serve both legal and statistical purposes, provision must therefore be made for meeting both requirements. The anticipated benefits will be both administrative and statistical: - cost economies, a new convenience in processing, a new ease of record exchange, economies in storage of the forms, and other advantages for the provincial administrators. At the same time, the statistical usefulness of the schedules will also have been thoroughly reviewed.

The Institutions Section is responsible for the production of a national hospital statistics series covering such topics as facilities available, services provided, personnel employed and finances. It includes all general and allied special hospitals (including mental institutions and tuberculosis sanatoria) whether they be public (no restrictions on the admission of patients), private (profit-making businesses) or federal (owned by the federal government and operated by the

Department of National Defence, Department of Veterans Affairs or the Department of National Health and Welfare).

During this period senior officers of the Section have completed the task of revising the Annual Return of Hospitals to account for and keep abreast of the changing scene in Canadian hospitals. Hospitals will be reporting their 1969 data on the revised questionnaire. In conjunction with the revision of the financial part of the annual return, the Canadian Hospital Accounting Manual, commonly referred to as CHAM, was also revised by the Canadian Hospital Association, which had engaged a firm of management consultants to carry out this assignment. Section officers spent much time with this firm in their deliberations to assure statistical consistency in any revision, and later attended provincial and regional institutes making the revisions known to the hospitals in association with the provincial hospital insurance plan authorities.

Section officers met on numerous occasions with the provincial hospital insurance authorities and representatives of the Canadian Association of Pathologists in the revision of the Schedule of Unit Values for Clinical Laboratory Procedures. Statistical measurement in this area of hospital activity required revision due to the advancement of automation and semi-automation, new procedures and new methods of carrying out procedures in the hospital laboratory. Hospitals will record their laboratory activity according to this revised schedule on the 1969 Annual Return of Hospitals.

The work-up of a new program under the heading Quarterly Hospital Information System was begun in close conjunction with the Canadian Hospital Association. At the time of writing, computer programming was approaching completion. The type of statistics are similar to those collected on an annual basis but of necessity are much more restrictive and selective. It is anticipated that in the future the report for the period ending fourth quarter will suffice for the Preliminary Report of Hospital Statistics. This will further reduce the time lag of this important publication to about four months from the present nine months. This has been a most time-consuming task for the Section and has been carried out in response to a genuine need for administrative tools of hospital management, and more current estimate of the hospital activity component within the national economic indicator system.

Results of the second annual hospital nursing staff salary survey (1968) were received towards the end of this period. This survey classified graduate nurses according to their employment category, academic qua-

lifications, and the type of public hospital in which the nurse was working. Salaries for qualified nursing assistants were also collected. Publication plans are underway to present these survey findings with comparable data from the first survey which took place in 1967.

In addition to what has already been stated, the section in its regular program, published the eleven annual reports covering the hospital industry in Canada. An unusually heavy demand for additional data has been experienced in this period, requiring the drawing together of information from numerous sources. This will in all likelihood continue with the implementation of the task force on health expenditure in Canada as a prime user of hospital statistics.

The Public Health Section of the Division collected and processed annual information on morbidity in general and special hospitals, including tuberculosis sanatoria, monthly information on incidence of tuberculosis sanatoria, monthly information on incidence of tuberculosis and weekly information on new cases of certain specified notifiable diseases. These latter diseases are either communicable in nature or of a type to be of particular and immediate public health concern. A number of special inquiries were answered, especially in the area of hospital morbidity, with emphasis on particular conditions and particular age groups; one study related hospital, birth and death records.

The Division was represented on a Committee, appointed at the Third National Tuberculosis Conference in 1966, and working under the auspices of the Canadian Tuberculosis and Respiratory Disease Association prepared *Classification and Reporting of Tuberculosis in Canada*, a manual for use in chest clinics, hospitals, sanatoria and Departments of Health.

Respecification of the notifiable diseases reportable to DBS in terms of the new International Classification of Diseases (Adapted) was made and two diseases - measles and rubella - were added to the list. This evaluation of the adequacy of the list was carried out by the Epidemiology Division, Department of National Health and Welfare, with the collaboration of members of the division and representatives of the Advisory Committee on Epidemiology.

The Division prepared and published a French version of the International Classification of Diseases (Adapted), prepared and distributed in preliminary form a French version of the Classification of Surgical Operations, and prepared and distributed Interim Indexes to ICDA in both French and English. A seminar on the use of the new classifications for morbidity coding was held in

October 1968 and was attended by over ninety persons from the ten provinces and the United States.

The Mental Health Section produces national statistics on mental patients treated in psychiatric in-patient facilities, in terms of patient characteristics and patient movement as it relates to mental disorders. Tabulations organized in terms of type of psychiatric institution were published in *Volume I - Institutional Admissions and Separations* and *Volume II - Patients in Institutions*. A new *Manual for the Classification of Psychiatric Diagnoses, Based on the International Classification of Diseases, Adapted (ICDA-8)*, was prepared for use in all psychiatric in-patient facilities reporting to DBS.

A special analytical report, *The Expectation of Admission to a Canadian Psychiatric Institution*, presents data showing the expectation of admission on the basis of the first admission and mortality rates prevailing in 1965. These joint expectancy measures are shown by province, sex and single years of age. They thus reflect the expectation that a person of a given age and sex would have of becoming an in-patient in a Canadian psychiatric facility. The study, which employs standard life table methods, expresses these expectations for all psychiatric diagnoses combined and separately for mental retardation.

Program directors of the provincial alcoholism foundations were visited with the intention of bringing these institutions into the mental health reporting system. Provincial directors of Mental Health Services were visited to study provincial programs and requirements in order to improve our statistical reporting system. Planning continued for the inclusion of all psychiatric patients in general and allied hospitals (estimated at over 65,000 or almost 50 per cent of separations) not now covered by this reporting system. Preliminary discussions were continued for the inclusion of out-patient centres in the national reporting system. Special tabulations requested by research specialists, government departments or agencies and other organizations in the field of mental health were many and varied.

The Judicial Section is responsible for national statistics on law enforcement, the administration of justice and corrections, including crime, delinquency, traffic enforcement, police administration, adult courts at the trial and appeal levels, juvenile courts, penitentiaries, prisons and reformatories, training schools, parole and such continuing special studies as murder statistics. All annual reports for 1967 were published except *Statistics of Criminal and Other Offences* (1966).

The preliminary report on Police Administration, Crime and Traffic Enforcement Statistics for 1967 was released April 19, 1968. This is the earliest date preliminary police figures have ever been released. For the first time two of the Section's annual *Police Reports*, *Administration* and *Crime*, were released before similar data were available in the United States.

Work continued on the development of statistical series which permit the integration of information from each of the agencies involved in the administration of justices - the police, the courts and the correctional and after-care services.

In one province a system developed jointly by provincial and Bureau personnel has been in operation since January 1, 1968, linking police, courts and institutions. This system has been designed to meet the administrative requirements of the provincial authorities and to permit studies on the efficiency of each agency and the effectiveness of the process of justice as well as providing the Bureau with statistics. The first years' data have been received and coded and plans for computer processing are nearing completion.

In a second province another program has been developed for the courts to facilitate the administration of justice and provide complete and accurate statistical data. This program was field-tested in late 1968 and has been in operation since January 1, 1969.

These integrated criminal statistics programs were explained by provincial officials and officers of the Judicial Section in five papers presented at the American Congress of Corrections. Another province has entered into preliminary discussions with Bureau officers regarding such an integrated system.

A new reporting system for juveniles has been jointly developed and tested in a third province. A fourth province has expressed strong interest in a similar system.

Special reporting arrangements, made necessary to accommodate changes in provincial legislation in several provinces, were developed and put into effect in the Uniform Crime Reporting Program. In one province, these include the scoring and clearing of offences involving juveniles who are no longer to be formally charged by the police with violations of provincial statutes and/or municipal by-laws. In the same province, some offences under the highway traffic act for which offenders had been routinely charged are now classified as a violation of a rule for which charges cannot be laid. In this and another province, charges which were formerly laid

under the provincial liquor control act in connection with intoxication in public places can no longer be laid by the police. These changes will have a considerable impact on provincial statute data for both Canada and the provinces in the annual crime and traffic enforcement statistics for 1968 and subsequent years.

It was decided to discontinue publication of statistics relating to traffic accidents with property damage \$100 or less, in the annual report *Traffic Enforcement Statistics*. This decision was taken when it became apparent reported statistical data relating to this kind of motor vehicle traffic accident were not realistic either because persons involved were not required to report the accident or, because of variations in police policy and practice as to whether to accept reports or investigate accidents of this nature.

At the request of and in co-operation with the Canadian Association of Chiefs of Police, the first of a two-year special study of robberies by type of establishment was undertaken. This is the first study of its kind in Canada and the information, which is in preparation for publication as an appendix to *Crime Statistics 1968*, will be useful to the police in analysis and planning in connection with this type of crime.

A special survey was made, under contract to the Department of the Solicitor General, of police education and training standards in Canada. This survey is part of the preliminary planning for a Canadian Police College. Statistical tables were developed and presented for internal use in the analysis and planning work within that Department. Some general data from this survey will be published in the 1968 report on *Police Administration Statistics*.

Redevelopment of the statistical system for the National Parole Board has been completed and converted to computer. The Section was provided with clerical resources for a continuing recidivist study to cover all persons released from penitentiaries. The Training School Reporting Manual was revised and distributed to respondents.

One hundred and thirty-two visits were made to police departments in six provinces under the Section's respondent review program, implemented in 1966, in which departments are visited, on a priority and a provincially rotating basis, from year to year. The main objective is to improve the quality of police statistics. A seminar on reporting methods was also conducted for police personnel in a Western province.

In addition, officers of the Judicial Section attended the annual conferences held by national, regional and provincial Associations of Chiefs of Police where they presented papers or gave talks, and served on Uniform Crime Reporting and Advisory Committees. The installation of Telex facilities at the Bureau provided an additional means of communicating with many police respondents, and was useful in improving timeliness of reporting.

Many requests for a wide variety of statistical information were received from respondents, Members of Parliament, government agencies and departments, universities, the news media and other organizations, and from individuals with varying interests in police, court and correctional statistics. An increasing number of these requests were for data on murders, narcotic and controlled drug offences, and crimes of violence. Several requests concerning the use of firearms in the commission of offences, such as murder, were received from agencies of the United States Government. Inquiries from the United States were also made on behalf of members of the U.S. Senate and Congress interested in obtaining statistical data from other Western Countries to be used in connection with new gun control legislation introduced both in the Senate and the Congress following the assassination of a Civil Rights Leader and a United States Senator during 1968.

Provincial Liaison and Consultative Services

The main functions of the staff are to strengthen the Bureau's liaison and communication arrangements with the provinces, and to provide or arrange for consultative services to the provinces and others. New co-ordinating responsibilities were added in the field of travel, tourism and recreation statistics in September 1968 and a new Co-ordinator for the staff was appointed at that time.

Consultative services were rendered to federal departments, provincial governments and agencies, private organizations, associations and universities. A housing survey of the Whitehorse Metropolitan Area was conducted on behalf of the Yukon Territorial Government. Many new contacts were established and meetings between officials of DBS and provincial departments and agencies were organized. The Co-ordinator visited all the provinces.

During the year, the report of the Sixth Federal-Provincial Conference on Economic Statistics, held in May 1967, was issued in bilingual format. Members of the staff participated in internal, interdepartmental and federal-provincial committees and subcommittees.

Meetings of the following Committees of the Federal-Provincial Conference on Economic Statistics were held in the 1968-69 fiscal year:

- (1) Working Committee on Statistical Legislation
- (2) Advisory Committee of the Federal-Provincial Conference on Economic Statistics
- (3) Committee on the 1971 Census
- (4) Committee on Retail Prices
- (5) Committee on Labour Statistics.

Activities in the field of travel statistics involved direct participation by the Co-ordinator in various national committee meetings, the Annual Convention of the Canadian Tourist Association and the Federal-Provincial Conference on Tourism. The Co-ordinator was also involved in the preparations for a major household Domestic Travel Survey which is scheduled to be carried out by DBS in 1970-71.

Special Surveys Division

This Division is responsible for all field survey activities of the Dominion Bureau of Statistics. It administers 8 regional offices located in St. John's, Halifax, Montreal, Ottawa, Toronto, Winnipeg, Edmonton and Vancouver. These offices have a variety of functions including the conduct of the monthly Labour Force Survey, monthly Consumer Pricing Surveys, a continuing Job Vacancy Survey, and numerous special surveys. They service other DBS divisions by collecting a variety of reports from local business establishments. They foster and promote the fullest use of DBS statistics by providing a local reference library and by giving assistance to users in satisfying their statistical needs.

The monthly Labour Force Survey involves the employment of some 750 part-time interviewers who obtain information by personal interview each month from a scientifically selected sample of 29,000 households located in some 400 different locations across the country. Questions on labour force activity are asked each month and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five regions of the country.

In conjunction with these monthly surveys, special questions are usually included relating to other matters of current interest. During the current year, these questions dealt with rents paid, education, work history, house-

hold facilities and equipment, medical care, smoking habits and work patterns. These supplementary surveys are usually conducted at the request of other divisions within the Dominion Bureau of Statistics and of other federal government departments.

Another important activity of the regional offices is the collection of monthly data on retail prices of commodities and services used in the compilation of the Consumer Price Index. This index is largely based upon prices for some 300 commodities which are collected by regional office staff in representative retail outlets in 30 of the larger cities of the country. In January 1969, a national Food Expenditure Survey was started which will involve the interviewing of approximately 1,200 households each month throughout the calendar year 1969. These households will be requested to maintain a diary of their food expenditures over a two-week period to provide the Dominion Bureau of Statistics with detailed information concerning the quantities and values of food items purchased.

Substantial progress was made in the development of a continuing Job Vacancy Survey. The initial development of this survey was started during the previous fiscal year. "Profile Interviews" for most sectors of the economy have now been largely completed. The purpose of these interviews is to determine those officers within a firm who are closely associated with staffing functions and to clearly define those particular occupational groups or units within the firm for which each can report. So called "reporting units" are thereby defined within each firm. The survey methodology, now almost completely developed, involves mailing questionnaires at periodic intervals to all such reporting units and interviewing a sample of the reporting units to determine reporting errors. The results of these interviews will permit the application of correction factors to improve the accuracy of the resulting job vacancy estimates. This survey is being conducted primarily for the use of the Department of Manpower and Immigration for policy and program development.

The regional offices have other functions such as the collection of business reports for almost all subject-matter divisions of the Bureau. A number of regional offices were involved in Census tests of various kinds which were carried out at different locations during the year. These tests play an important role in determining the specific procedures to be followed in conducting the 1971 Censuses of Population and Agriculture.

OPERATIONS AND SYSTEMS DEVELOPMENT BRANCH

The Operations and Systems Development Branch exists to service the needs of the statistical and administrative branches of DBS for certain equipment and professional and technical skills which can not economically be decentralized to individual divisions and branches. Mechanical and electronic data processing services are provided by the Tabulating Services Division, the professional skills and advice required to use computer methods are provided by the Central Programming Division, advice on the organization and use of office staffs by the Management Services Section, and a central list of establishments covered by DBS surveys with the industrial and geographical classification codes for each by the Central Registers Section. The branch also includes a small headquarters staff concerned with overall branch administration, co-ordination and development.

Most of the work which involves branch headquarters staff also involves officers of various divisions and sections. The most important such project in 1968-69 was the evaluation of the tenders received for the supply of a new large computer system to DBS. This work was completed in July, a recommendation sent to the Treasury Board early in August, and in September authority was received to acquire an IBM 360/65 computer system.

During the balance of the year all staffs were heavily involved in preparing to implement the new computer system. In particular, the Tabulating Services Division undertook the task of site preparation (which included the temporary relocation of the existing computer room and extensive involvement with the Department of Public Works and contractor personnel), and the Central Programming Division the task of modifying computer systems and programs to run on the new equipment. Extensive training for the staffs of both divisions in the use of the new equipment was planned and initiated.

The organization of the branch was further modified in line with apparent requirements of the new computer system, and further modifications were planned. Among the more important decisions reached were to build a small group of operating system programmers into the Tabulating Services Division, and to transfer responsibility for running maintenance of developed computer systems to that division. These changes were intended both to ensure that full operating responsibility could be assigned to the Tabulating Services Division and also to free the Central Programming Division to concentrate on the task of developing new and modified computer systems required by emerging statistical needs. It was also decided to reorganize the latter

division on a functional basis as soon as the initial pressure of program conversion work began to relax.

There were further tests of optical character recognition equipment during the year with particular reference to the apparent needs of the 1971 Census, but no decisions were reached. A major background study of available optical character recognition equipment and its possible value in DBS work was also initiated.

Tabulating Services Division

Most of the equipment used in processing DBS statistics in 1968-69 has been in use for some time. The equipment installed in DBS included:

- (1) the IBM 705-111 computer originally acquired in 1960-61;
- (2) the IBM 1401 computer originally acquired in 1961-62;
- (3) the IBM 360/30 computer acquired in 1966-67 and substantially upgraded in 1967-68;
- (4) more than 100 key punch/key verify machines;
- (5) a wide variety of unit record equipment including sorters, collators, reproducers, interpreters, card processing machines and a mark-sense reader;
- (6) some 35 comptometers, desk calculators and similar machines;
- (7) a terminal providing a link with a Univac 1108 computer system.

New equipment introduced during the year included four Honeywell Keytape units. Instead of producing punched cards these machines enter data directly on computer tape.

Throughout the year the computer centre operated on at least a 3-shift, 24-hour day, 5-day week basis. Early in the year it was necessary to include some weekend work to maintain schedules and meet target dates, and from October the centre was on a full 24-hour day, 7-day week bases. A growing amount of DBS work had to be processed outside.

The organization of the division was modified during the year in preparation for the introduction of the new 360/65 computer system expected in June, 1969. Computer-related operations (including key punching and unit record equipment) were grouped under the senior assistant director, and liaison and scheduling activities grouped under a second assistant director. These changes should facilitate actual operations while improving the division's ability to monitor work flows and maintain close contact with its clients.

Central Programming Division

There was a heavy turnover of staff during the year which meant an active campaign of recruiting was required throughout the whole year to maintain the previous year's level as well as fill additional positions. There were 20 separations from the division exclusive of those transferred to other areas within OSD Branch. Of the 20 resignations, 15 went to private industry and consulting firms. There were 32 additions to the staff. The division has been assigned overall responsibility for meeting all needs of the OSD Branch for programmer and computer analyst recruitment.

A total of 3,160 days training was provided. This was larger than in previous years because of the pending introduction of a new third generation computer.

Resources were provided from the division for preparation of specifications, bench-mark programs, evaluation criteria, manufacturer's demonstrations, evaluation and selection of new equipment to be installed in mid-1969. Resources were also provided for testing of Optical Character Recognition equipment suitable for the 1971 Census and other DBS surveys.

Conversion of continuing systems from the IBM 1401 and 705 computers to the 360/65 to be introduced in 1969 was started during the year. Analysis and, to a lesser extent, programming has been started for the 1969 Census Test and the 1971 Census.

Manpower was provided for Manpower Inventory Boards and for Personnel Selection Boards in Europe, Western Canada, Montreal and Ottawa as required by the Public Service Commission.

Trips were made to Montreal, Washington, Minneapolis, New York, Hartford and Los Angeles in connection with equipment evaluation and selection. Personnel attended seminars and training courses in Ottawa, Kingston, Carleton Place, Tarrytown, N.Y., New York and Washington.

A total of 818 programs were written during the year for use on DBS computers and on the Central Data Processing Service Bureau, University and commercial service centre installations.

Management Services Section

This section provides a departmental consultative service to assist officers of the Bureau in improving the efficiency of their operating staffs. The increase in electronic data processing in the Bureau has caused much of the work of the section to be concerned with

feasibility studies and those administrative and organizational problems which are particularly associated with rapidly changing technology.

DBS was one of three federal departments which participated in a pilot work simplification program at the invitation of the Management Improvement Policy Branch of Treasury Board. The Management Services Section provided the liaison between the Bureau and Treasury Board during the planning stages of the project. The section continued to monitor the ongoing work simplification program in the Bureau throughout the year.

Comprehensive time and method studies of census test operations were conducted in Toronto in June and in four rural areas in October. These studies have resulted in considerable changes to both enumeration and office procedures which will result in substantial savings during the 1971 Census. A revised basis of payment of Census enumerators was also developed which will speed up payments and reduce office checking procedures.

A basic EDP familiarization course was developed for junior clerical staffs whose duties are being altered by changes in or the introduction of automated processing.

Detailed studies were made of processing procedures in a number of subject-matter areas as part of a general program of increased or improved automated processing. These areas include the Governments Division, the Transportation Division, the Labour Division, the Prices Division, and the Corporations and Labour Unions Returns Act Administration.

Work was started on planning accommodation and service requirements in the new building which is proposed for the Bureau.

Work was also started on an interdivisional study of the factors which tend to delay the processing and publication of DBS statistical reports.

Central Registers Section

The Central Registers Section administers and develops the DBS Central List of Companies and Establishments, which provides the basic vehicle for standardizing the classification of companies and their subdivision into standard reporting units for individual DBS surveys. During the year the Central List framework was applied to additional DBS surveys bringing the total to 30 surveys entered in this record. The Department of Industry and the Department of Labour adopted the Central List classification and numbering system to identify businesses with which they are in

contact, and two large business firms applied the system to their internal records. Individual businesses as well as business associations continued to examine this record as a possibility for establishing a standard "vendor code" system.

Investigation and resolution of inconsistencies in the Central List continued. During the year 516 such problem cases were cleared. In addition, regular maintenance of the record required 30,500 additions, 15,140 deletions and 38,000 revisions of existing records due to changes in name, location, activity or establishment breakdown.

By year-end, the computer tape record had been expanded to show full company name, location address, standard industrial and geographical classification codes and unique "lifetime" identification number. Accommodation was also made on the tape record to show additional information which will allow the reconstruction of the list as of any previous point in time.

During the year, Central Registers Section was the focal point of a small working committee comprising representation from DBS, the Unemployment Insurance Commission and the Taxation Division of the Department of National Revenue. The task of the committee was to elaborate the proposal of the Interdepartmental Committee on Socio-Economic Statistics that the DBS Central List form a nucleus for the development of a "Common Employer Numbering System" comprising all businesses in Canada, to accommodate the needs of all users in government departments. The work of the committee resulted in tentative plans for the co-opera-

tion of the three represented departments to develop such a list.

Paralleling the efforts of the interdepartmental working committee but with emphasis on immediate needs of DBS, plans were under way by year end to expand the Central List to full coverage of all businesses in Canada. This expansion will increase the present record from 150,000 to 600,000 entries. The full record is required for the 1971 Census of Population and Census of Distribution and with accommodation for categorizing each entry by size (based on value of assets or revenue), will afford a frame for sample selection as required for DBS surveys. Preliminary to expansion of the full record, plans were being finalized to secure full coverage of all businesses in the St. Catharines, Ontario, and Sherbrooke, Quebec, areas as pilot efforts to meet the needs of a census test in these areas in September, 1969.

The co-operative arrangement with the Unemployment Insurance Commission was continued, whereby their local offices collect a Nature of Business Report from all new registrants. This has proven to be the major source of information necessary to keep DBS survey lists up-to-date. It results in the semi-annual publication *New Manufacturing Establishments in Canada*. During the year additional special tabulations of new businesses in the Atlantic Provinces were prepared for the use of the Atlantic Development Board in an economic study of that area. Special tabulations covering the birth and death of manufacturing establishments in Manitoba were also prepared to meet the needs of the Manitoba Department of Industry and Commerce.

ADMINISTRATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including administration, staff organization and relations, classification, training and development, bilingual development, records management, financial control, publications distribution and office services such as printing liaison, the addressograph unit, stenographic pools, drafting, forms design, supplies, copying, mail and messenger services.

Staff Organization

Although the recruitment freeze, ordered by Treasury Board at the beginning of the year has an effect, the department was able to

maintain its level of staff resources and following the removal of the freeze, increase its resources marginally. A net increase of 51 in continuing staff was realized by the fiscal year ending March 31, 1969. The continuing staff on that date numbered 2,868. Changes during the year included a net increase of 30 professionals, resulting from the hiring of 74 persons offset by 44 separations. An increase of 75 was also achieved in the Administrative and Executive categories, with decreases of 54 in the Technical and Administrative Support categories.

Promotions of professional statisticians and economists and other centrally controlled groups, such as Computer Systems Administration,

Personnel Administration, Financial Administration, and Organization and Methods, were effected in the main through appraisal boards. Additionally, some 125 promotional competitions were administered during the fiscal year. Thirteen appeals were lodged against the results of these competitions with two appeals being allowed by the Public Service Commission Appeal Board. During the year, over 400 man-years of casual employment were effectively utilized.

The problems encountered in the application of the language tests prescribed by the Public Service Commission led to the development and use by the department of its own tests, with the concurrence of the Public Service Commission.

Additional responsibilities were assumed by the Staffing Section with the acceptance of delegation of staffing authority for the Administrative Support and Operational Categories, and with the agreement to work-share staffing authority for the Statistician and Economist class for levels 2 to 5 inclusive.

Staff Relations

Two of the first contracts negotiated by the Treasury Board as employer with the employee associations were introduced into the Bureau in the latter part of the year. These covered a small number of employees in the General Labour and Trades Group and the General Services Group of the Operational Category.

Extensive preparatory work and consultations took place during the year in anticipation of bargaining for the Social Science Support Group, the Economics, Sociology and Statistics Group, and the Computer Systems Administration Group, for which DBS is a major user department.

The Section continued its advisory and monitoring role in the area of grievances, complaints, and discipline generally. Some counselling work was also performed to help employees with problems.

During the year, the Chief of the Section has continued to administer employee appraisals for the Economist, Statistician and Technical Officer classes. This function is now being transferred to a new Manpower Planning Section.

Classification

During the year, 329 jobs were documented and evaluated by the Classification Staff within the limits of the classification authority delegated to the Bureau. In addition, 166 other

programs in the fields of supervisory and management development, professional development, computer training and a variety of other skills. The staff operated as consultants to line managers in initiating general surveys of training needs and in developing the framework of a program to satisfy these needs.

In the area of supervisory and management training, 66 selected employees at the junior and intermediate management levels were given theoretical and practical training in effective supervision and management principles and techniques. The selection and assignment of candidates for specialized Public Service Commission courses, university extension courses, and courses offered by other educational institutions were also co-ordinated and administered by the training staff. Six employees in the professional category were granted educational leave to improve their educational qualifications so as to better perform their present or anticipated duties.

The computer training programs were co-ordinated with a view to training management in understanding the benefits and limitations of the computers in their respective fields. Data processing courses for supervisors were administered by the Bureau for 128 of its personnel while 195 non-supervisory personnel participated in other computer courses primarily offered to acquaint them with computer operations in the government and to give them a basic understanding of the theory of computers as well as its practical applications.

This Section also conducted induction and orientation sessions for new DBS employees. About 100 personnel are currently at various cases were documented and submitted to the Bureau of Classification Revision during the same period. At the time of the report, there were 230 outstanding cases awaiting action.

The conversion of over 400 positions to the Economics, Statistics and Sociology Group and of 280 positions to the Social Science Support Group were processed during the year. A number of anomalies were identified, described anew and re-evaluations were requested. This supplementary process produced results which ensured full acceptability and support from top departmental management for the classification conversion for the groups affected.

A course in job analysis and job evaluation attended by 25 employees was completely planned, organized and conducted by the classification staff for line officers of the department.

Training and Development

This Section continued to carry out basic

levels of training in a second language training program. Special training was organized for 16 Foreign Aid students referred to DBS by the Canadian International Development Agency. Statistical and mathematical courses now have 53 personnel in attendance as part of a professional development program. Accounting training for the clerical and technical staff is in progress to meet the specific needs of this department. Also, an employee's handbook is in the final stages of translation and will be available soon for all employees.

Professional development has been given a great deal of attention this year and plans are now being formulated for a more comprehensive and attractive program for these employees.

Incentive Awards

Of 46 suggestions carried over from the 1966-67 fiscal year, 30 were rejected during the year, 4 received approval and granted awards valued at \$120; 5 are pending implementation and 7 are still under investigation. During the 1968-69 fiscal year, 29 new suggestions were received, of which 11 have been rejected, 1 has been approved and granted an award of \$275 and 17 are still under investigation.

Bilingual Development

On August 15, 1968 the office of the Advisor, Bilingual Development, was established in order to implement the government's policy on bilingualism in the Public Service. Administration of the language courses remain with the Training Section.

An inventory of the linguistic capacities of all employees of the Bureau was made and the information was computerized for the purpose of assisting in the designation of bilingual positions, meeting the requirements of service to the public and in internal communications.

During the period under review, 65 DBS officers undertook French training in total and partial immersion courses, while 17 others followed semi-weekly classes and 5 officers took the English courses.

A program of follow-up to language training aimed principally at students of French was developed. Part of the program consists of the use of a study room equipped with audio-visual equipment where language students can practise and improve on their language skills between training sessions and practise conversational French with a group of selected French-speaking officers. A program of unilingual luncheons between students and their French speaking tutors was also organized. Of the

total number of 186 past and present language students, 143 are participating in the follow-up program in one way or another.

The publication of a bulletin addressed to the language students was undertaken, for the purpose of advising students of activities and events conducted in French which are taking place in the National Capital area.

A start was made in assessing the need to designate positions where bilingualism is an essential requirement or a desirable circumstance. Work on this program was delayed pending passage of the Official Languages Act.

A survey of all publications requiring conversion to French was made and work is progressing towards the objective of having all regular publications bilingual within a reasonable time.

Records Management

Records management co-ordination is a new function established during the year. A Records Manager and two assistants have been assigned and studies have been made of records and records management procedures in three large divisions. Inventories of the records being retained were completed, assessments of the records operations were made, and reports containing recommendations were submitted to the divisional heads. Plans for the expansion of this central function were formulated.

Financial Services

This Section has two main functions which are performed by the Accounts Unit and the Publications Distribution Unit.

The Accounts Unit is concerned with the overall financial operation of the Bureau including the co-ordination of the program review and estimates. The Unit examines and controls expenditures, audits travel claims and commercial accounts, interprets financial regulations and maintains a financial management reporting system.

The Publications Distribution Unit is concerned with the sale and distribution of DBS publications. During the 1968-69 fiscal year 1,819,769 pieces of mail were dispatched and 21,942 mail orders were received. The subscription mailing list is currently made up of 204,743 addressograph mailing plates.

Office Services

As of March 31, 1969, Typing and Transcribing Services were composed of six Typing Units. The new system of work measurement

(based on predetermined standards) introduced April 1, 1968 in all Typing Units is proving satisfactory and is providing much needed data for assessing the relative efficiency of operators, total staff requirement, as well as composition costs. During the fiscal year 164,960 pages were produced.

The Printing Liaison Services Unit, in addition to maintaining liaison with the Vari-type and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications. During the year 12,651 pages of copy for printing were processed.

The Drafting Unit planned, organized and prepared a total of 2,705 economic charts, diagrams, maps, displays, publication covers and pamphlets, for the divisions of the Bureau and other departments and agencies of the Government.

In the Forms Design Unit continuing liaison was maintained with departmental officials to advise on printing schedules, priorities, technical specifications and designs for proposed new forms and on other aspects of forms management. The past year showed a continuing

trend in the increasing use of specialty forms, the introduction of additional bilingual forms and the conversion of more questionnaires to computer application.

In the Addressograph, Mail and Supplies Unit 16,560,911 forms were addressed for the various divisions of the Bureau. In addition 235,883 plates were embossed, 110,206 corrected and 561,908 deleted. There were 9,988 pieces of mail enveloped by hand and 3,576,715 by machine. A second heat transfer machine was acquired which will permit more addressing jobs based on computer-originated address listings, and in the period under review, 2,784,676 forms were processed by this method.

During the year 23,403 bags of mail were deposited with the Post Office and 9,676 were received, in addition to 26,539 pieces of registered mail, 21,570 air mail, 1,813 special delivery, 6,962 parcel post and 61,934 foreign mail. This includes 1,673 bags dispatched for the Department of Agriculture.

The Supplies Unit submitted 1,925 printing and stationery requisitions to the Department of Defence Production and other sources for an estimated value of \$910,705. The supplies inventory as at March 31, 1969 was \$52,606; the annual stock turnover rate, therefore was 17.3.

DOMINION BUREAU OF STATISTICS SENIOR OFFICERS

Dominion Statistician Walter E. Duffett

Assistant Dominion Statistician (Integration and
Development) S. A. Goldberg

Assistant Dominion Statistician (Administration,
Finance and Personnel) H. L. Allen

Assistant Dominion Statistician (Socio-Economic
Statistics Branch) L. E. Rowebottom

Director General (Operations and Systems Develop-
ment Branch) L. A. Shackleton

Director General (Economic Accounts Branch) E. B. Carty

Director General (Financial Statistics Branch) G. A. Wagdin

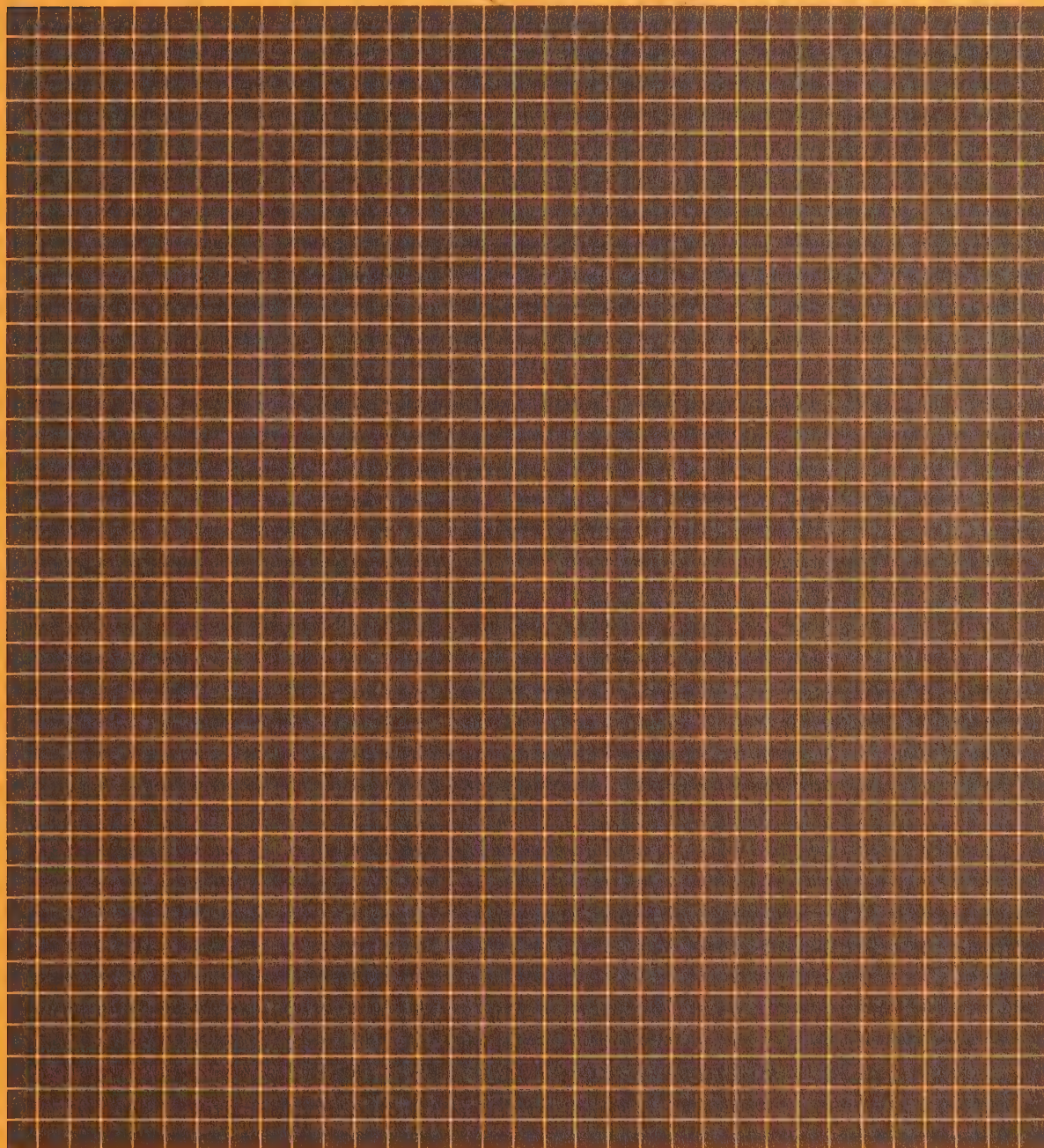
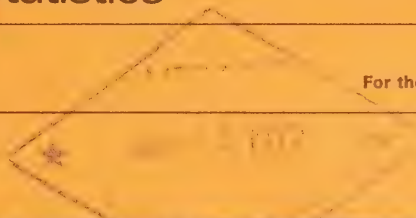
Director General (Economic Statistics Branch) V. R. Berlinguette



Dominion Bureau of Statistics

Annual Report

For the Fiscal Year ended March 31, 1970



CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1970

November 1971
0001-502

Information Canada
Ottawa

THE HONOURABLE JEAN-LUC PEPIN, P.C.,
MINISTER OF INDUSTRY, TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the
Dominion Bureau of Statistics covering the operations and
services rendered during the fiscal year ended March 31, 1970.

Respectfully submitted,

Robert E. Duffett.

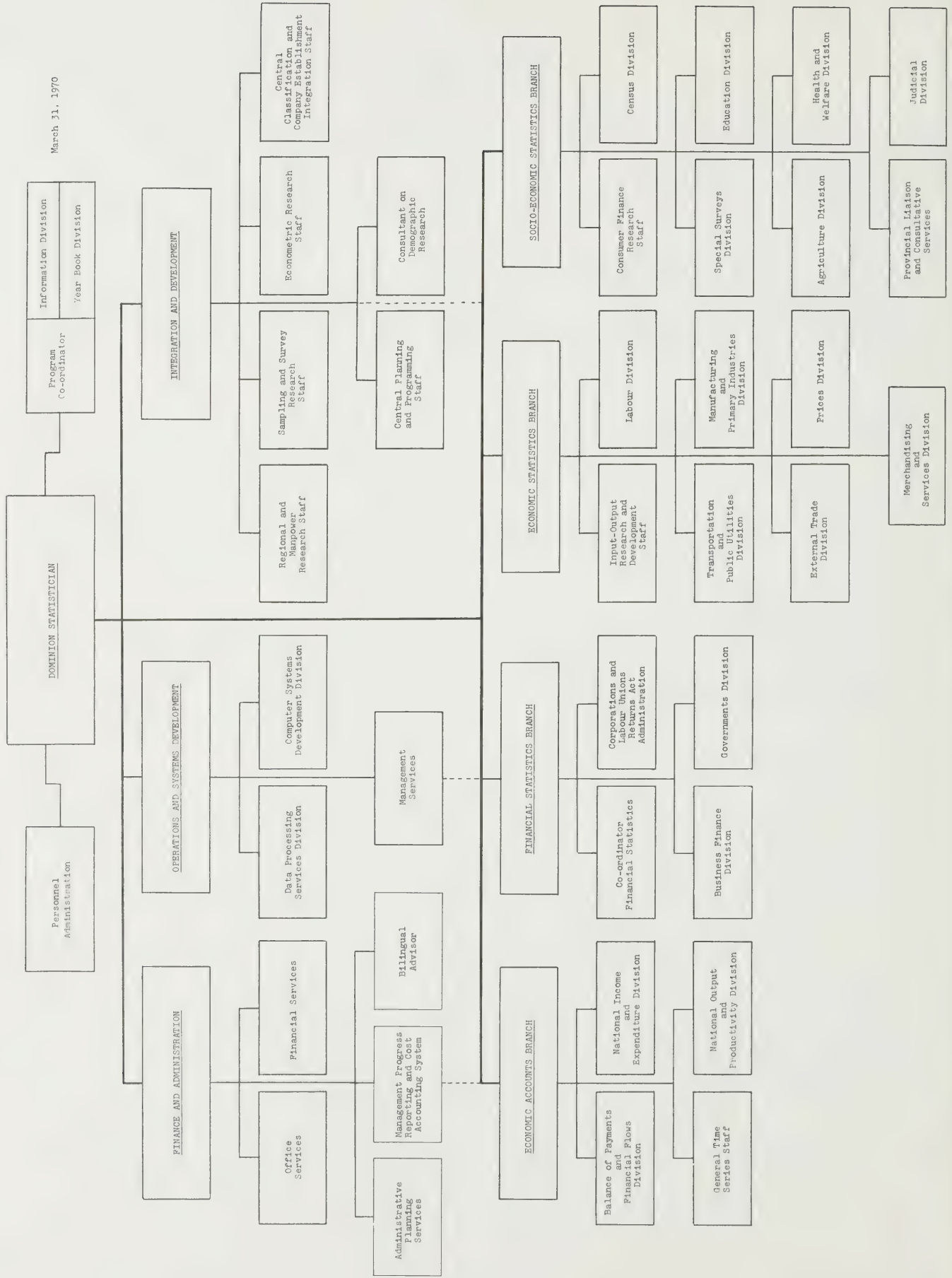
Chief Statistician of Canada

Ottawa, Canada
November 1971.

TABLE OF CONTENTS

	<u>Page</u>
Chart of the DBS Organization	6
General Activities	7
Information and Year Book Group	
Canada Year Book Division	7
Information Division	8
Integration and Development Staffs	
Central Classification and Company-Establishment Integration Staff	9
Sampling and Survey Research Staff	11
Econometric Research Staff	16
Regional and Manpower Research Staff	16
Central Planning and Programming Staff	17
Consultant on Demographic Research	17
Economic Accounts Branch	
Balance of Payments and Financial Flows Division	17
National Income and Expenditure Division	18
National Output and Productivity Division	19
General Time Series Staff	19
Financial Statistics Branch	
Business Finance Division	19
Corporations and Labour Unions Returns Act Division	21
Governments Division	21
Economic Statistics Branch	
External Trade Division	23
Input-Output Research and Development Staff	23
Labour Division	24
Manufacturing and Primary Industries Division	25
Merchandising and Services Division	26
Prices Division	28
Transportation and Public Utilities Division	30
Socio-Economic Statistics Branch	
Agriculture Division	32
Census Division	35
Consumer Finance Research Staff	36
Education Division	37
Health and Welfare Division	40
Judicial Division	45
Provincial Liaison and Consultative Services	45
Special Surveys Division	46
Operations and Systems Development Branch	47
Administrative Services	
Personnel Administration	48
Management Progress Reporting and Cost Accounting System	50
Bilingual Development	50
Administrative Services Planning	51
Financial Services	51
Office Services	51
Dominion Bureau of Statistics Senior Officers	53

March 31, 1970



GENERAL ACTIVITIES

While all Divisions of the Dominion Bureau of Statistics were active within their own spheres during the year, two important long-run activities were of particular interest. The first was preparation for the 1971 Census, involving lengthy consultations with users, planning of a long questionnaire form, the development of new technical features such as self-enumeration and a unique data retrieval system, and the final large-scale census tests. The other major DBS activity worthy of special attention was work on a new Statistics Act, seeking improved co-operation with the provinces and the possibility of access to income tax data for statistical purposes. While the development and drafting of the new legislation involved much work during the year under review, the bill was not submitted to Parliament until the autumn of 1970.

A general review of DBS structure and programme was undertaken for the Senate Committee on Science Policy, and a comprehensive report was prepared which was of general interest to persons interested in DBS in Canada and abroad. The Committee had not reported at the year-end.

Considerable attention was denoted to the development of possible procedures for the formal planning of the DBS programme within the context of the planning, programming, budgeting philosophy, which was being increasingly used in Canadian Government budgetary procedures. A comprehensive cost and progress reporting system was close to completion by the year-end; and a good deal of thought was denoted to the possible use of

cost-benefit techniques in setting programme priorities. This poses great difficulty in statistical programmes where the product is an intermediate one, designed to facilitate good decision-making elsewhere in the economy. A paper on this subject was prepared by the Dominion Statistician for the Conference of European Statisticians, following discussions with some of the principal European and North American statistical offices.

The Bureau continues to take an interest in the statistical needs of the developing countries. Plans were finalized, in co-operation with the Canadian International Development Agency, for the provision of a computer, and accompanying programmes and training facilities, to the West Indies for the processing of the 1970 Census in that area. Preparations were made for the seventh Conference of Commonwealth Statisticians to be held in India in the autumn of 1970. Since India had not been represented at the previous conference (held in Ottawa in 1966), Canadian assistance played a significant part in planning the conference.

Statistical programmes are largely dependent on the skill of those immediately responsible for them and retirements and staff turnover require constant attention to recruitment. A new Director of the Education Division was appointed during the year, and a series of important new projects were initiated. Here, as everywhere in the Bureau, the statistical system is dependent on the faithful and imaginative work of the staff, which is gratefully acknowledged by the Dominion Statistician.

INFORMATION AND YEAR BOOK GROUP

The responsibilities of the Information and Year Book Group include development and extension of the uses of statistics in Canadian society, the compilation and publishing of a comprehensive reference volume, the *Canada Year Book* and the handbook, *Canada*, improvement and maintenance of good relations with respondents to DBS surveys, publicity, public relations and information activities for the Bureau and the operation of a departmental library.

Canada Year Book Division

The programme of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official basic reference reports on Canada, the *Canada Year Book* and the handbook *Canada*, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with

appropriate services for statistical research and study. The English and French editions of the *Canada Year Book* for 1969 and of the handbook *Canada 1970* were released in March 1970. The Spanish edition of *Canada One Hundred 1867-1967*, *Canada Cien Años 1867-1967*, was published in February 1970. During the year, personnel of the Canada Year Book Section also edited six census monographs and special labour force studies.

A special inquiries unit supplied a regular series of statistics for the United Nations Statistical Monthly Bulletins, the United Nations Statistical Yearbook and for the International Labour Office. In addition, it provided up-to-date revisions of Canadian statistical and textual material for many standard national and international reference works and dispensed current and historical data in response to multi-subject inquiries received by the Bureau.

The Library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff, research workers and the general public. It also has an extensive collection of statistical publications.

Information Division

Development of publicity, public relations and advertising programmes for the 1971 Census assumed top priority in the Division's promotional activities in 1969-70. Effective promotional support, always a critical factor in a given census year, takes on added significance in respect of the 1971 Census operation for which new, individual self-enumeration methods of taking the census are to be used (see Census Division).

Three full-scale trial censuses in September 1969 employing self-enumeration methods (in Sherbrooke, Quebec; St. Catharines, Ontario; and Souris, Manitoba) provided the opportunity for pretesting under field conditions, a variety of modern techniques for generating the high degree of public participation and individual co-operation called for in the self-enumeration method.

In Publicity Services, work for the trial censuses involved preparation of mailing pieces, posters, newspaper advertising, and other publicity materials such as radio and TV tapes and information kits for press, radio and TV, in addition to on-the-spot liaison with census officers, the media and community leaders, both before and during the actual taking of the trial censuses.

In statistical activities other than the Census, the Art and Design Section filled requests from 14 subject-matter Divisions for

modernization of cover format for their principal publications.

The Division continued, and in some cases expanded, its operations in promoting greater public awareness of the value and usefulness of statistical information and in developing a closer rapport between respondents to DBS surveys and the Bureau's divisions responsible for conducting them. Direct mail promotion to individual respondents continued to prove the most effective publicity means of maintaining and improving response rates in terms of both volume and promptness and response. New releases and feature articles in selected trade and business publications provided useful support to this activity.

The Division was again active in staffing exhibits highlighting DBS Services at meetings of various business and professional associations. These included: the Canadian Hospital Association in Ottawa; the Canadian Library Association in St. John's, Newfoundland; the Municipal Finance Officers Association in Toronto; the Air Transport Association of Canada in Montreal and the Canadian Horticultural Association in Ottawa. The American Statistical Association also invited the Bureau to exhibit at the ASA annual conference in New York in September. This exhibit was planned by the Division to highlight the centralized nature of the Bureau, Canada's statistical system.

For the third successive year, the Division conducted an advertising campaign in the business pages of leading dailies and the business and labour newspapers, to promote wider use of the statistical information available. Reply coupons inserted in the advertisements inviting requests for free packages of information relating to the inquirer's specific field of interest resulted in 3,306 replies over the period January 10 to March 31.

In the dissemination of statistics and information about the availability of statistics both the *DBS Daily* and its sister publication, the *DBS Weekly*, continued to gain appreciably in readership. At the end of the fiscal year 1969-70, circulation of the *DBS Daily* had increased to 2,800 from 1,950 in 1968-69, while circulation of the *Weekly* rose to 7,850 from 4,900 in the same period. Originally designed almost exclusively as vehicles for providing summary information to the Canadian news media, both bulletins now have a much wider audience among users of statistics in both the public and private sectors of business.

The Statistics Use Development Section continued to operate within the framework of three broad objectives: (1) research into who uses DBS information and how it is used;

(2) development of additional uses of statistical information, particularly by the business community, through industrial visits, seminars, lectures and courses, so that the output of DBS can be given wider application; and (3) elaboration and extension of the methods of reaching users and potential users so that DBS information may be made more accessible.

Numerous visits were made to individual business firms, industry associations, municipal boards of trade, professional associations, and other organizations during the year, mainly in the Montreal and Toronto areas where Statistics Use Development Officers are stationed. Some of the larger groups to which presentations were made included the Institute of Canadian Bankers, the Canadian Library Association, the Montreal and Toronto Boards of Trade, the McGill University Management Certificate Course, and the Quebec Association of Certified General Accountants.

During the year, work was begun on the research and writing of two instructional-type booklets illustrating practical applications of DBS statistics. These booklets will be published during 1970.

Plans were made during 1969-70 to place two additional Statistics Use Development Of-

ficers in the field in the coming year (in the Winnipeg and Vancouver Regional Offices) and to add to the Ottawa Headquarters staff to establish the operation on a continuing and more viable basis.

The Inquiries Section, the Bureau's central point of contact with the public, handled a monthly average of some 1,600 inquiries by mail, telephone and personal visits. The more complex queries involved a good deal of research in addition to the preparation of special tabulations -- mostly from within DBS -- but often from other governmental and private sources.

The bulk of the inquiries originated in Canada, but a considerable number were received from foreign countries.

During the year, the Section published two supplements to the *Catalogue of Publications*. The supplements are designed to keep users of DBS statistical information up to date on the volume of information available from DBS and include new titles issued, titles discontinued, and titles changed. Heavy demand for the catalogue resulted in a reprint of some 6,000 copies. Revisions of the 1968 Catalogue and the title, subject and commodity index for the next issue of the Catalogue were started during the year.

INTEGRATION AND DEVELOPMENT STAFFS

The following professional staffs are attached to the office of the Assistant Dominion Statistician for Integration and Development: Central Classification and Company-Establishment Integration; Sampling and Survey Research; Econometric Research; Regional and Manpower Research Staff; and Consultant on Demographic Research. A small planning group has been added this year. A review of the activities of these staffs during the fiscal year follows:

Central Classification and Company-Establishment Integration Staff

The main effort in classification work during the year has been directed toward the publication of revised industrial and occupational classification manuals for use in coding 1971 Census data. The 3-digit codes and classes of the *Standard Industrial Classification Manual* have been revised and revision of the index is now under way. Publication of the manual is expected in January 1971.

The census edition of the *Canadian Classification and Dictionary of Occupations*,

which is due about the same time has reached a similar stage of development. The structure of the classification to be used for census and other statistical surveys (major, minor and unit groups) is now complete and the index is well under way. The classification and index are being prepared for printing from magnetic tape which will then be available for rearrangement of the occupational material to suit particular requirements. An interim edition of the manual was tested on the October Test Census.

This is the first "standard" occupational classification to be prepared for use in Canada. It is the result of joint work of DBS and the Department of Manpower and Immigration. It is expected to be useful not only for the statistical and operational purposes of the sponsoring departments, but by many other governmental and private organizations. The complete classification and dictionary, including detailed occupational definitions, will be published by the Department of Manpower and Immigration.

The work on geographical classification during the year consisted mainly of bringing

the main file up to date, answering enquiries and producing special manuals for coding vital statistics records.

The Central Registers Section administers and develops the DBS Central List of Companies and Establishments, which provides the basic vehicle for standardizing the classification of companies and their subunits into standard reporting units for individual DBS surveys. During the year the Central List coverage was extended to include the Job Vacancy Survey, bringing the total to over 30 surveys now entered in this record. This, together with growth in survey coverage, increased the total number of records from 150,000 to approximately 200,000.

Investigation and resolution of inconsistencies in the General List continued. During the year, 487 such problem cases were cleared. In addition, regular maintenance of the file required 46,100 additions, 17,260 deletions and over 48,000 revisions of existing records due to changes in name, location, activity or subunit composition.

A major project for expansion of the Central List to cover all businesses in Canada got under way this year. The expansion and development of the Central List record, including a permanent identification number for each unit, forms an essential part of the Bureau's programme for survey development and integration, including better use of computers and related advanced technology. In preparation for expansion of the Central List, all records on the tape file were reviewed for completeness and correctness and an additional entry made for all records to facilitate alphabetical sorting. Procedures were finalized for geographical coding and entry into the file of some 200,000 employers not now in the Central List. This work is to commence immediately after year-end and will extend the Central List to cover all businesses in Canada with employees. Preliminary work was also undertaken in co-operation with other government departments to secure lists of proprietorships and partnerships with no employees for further extension of the Central List. Finally, basic identification information on all incorporated businesses was recorded to ensure that the Central List is complete for all corporations. When these phases have been completed, the list will cover all businesses in Canada, numbering some 600,000 records.

At mid-year, complete lists of all employers in the St. Catharines, Ontario and Sherbrooke, Quebec, areas were prepared for a test census conducted in October. Further plans were being developed in co-operation with the Census Division for the preparation of lists of employers required for industrial coding on the 1971 Census of Population.

The co-operative arrangement with the Unemployment Insurance Commission continued, whereby information on new businesses and revision of information on existing ones is obtained from UIC registrations. This has proven to be the major source of information necessary to keep DBS survey lists up to date. It also provides information for the semi-annual publication *New Manufacturing Establishments in Canada*.

The Company-Establishment Integration Section - is responsible for research into the relationship between statistical records obtained from companies and those from their constituent establishments. The principal objective is to develop means by which data from the two kinds of reporting units can be related and used in a co-ordinated fashion for economic analysis. Most companies consist of one unit engaged in one main activity but the relatively few complicated companies operating more than one unit tend to be the larger ones. Thus, the companies that report separately for their establishments have a disproportionate influence on the statistics for the industries affected.

With the growth in the Bureau's coverage of financial statistics in recent years, the problem of relating company and establishment statistics has become more acute. The Bureau's traditional surveys of employment, etc., use the establishment as the reporting unit to attain more precise industrial distributions of data. Financial statistics such as those of assets, liabilities and profits, are available only for companies because financial statements are prepared on that basis.

The work of integrating statistics from these two principal sources is approached in a variety of ways:

(a) Information is extracted from the file of company financial statements and supporting schedules submitted under the Corporation and Labour Unions Returns Act, for comparison with statistics obtained on the Census of Manufactures, Census of Wholesale Trade, etc. Results became available this year from a major study of wholesale trade undertaken for 1967. It provided financial and operating ratios for industries within wholesale trade, by province and by sales size category of businesses covered. In addition, detailed information was obtained for various expense items. This study, along with one of Funeral Directors, indicates that some data now collected from establishments could be obtained from the financial statements. A similar study of manufacturing returns is being undertaken this year in co-operation with the Manufacturing and Primary Industries Division.

(b) The record-keeping practices of large corporations have been under study for some time. A small number of large companies was selected for this study and the report is nearing completion. It is expected that the results of this detailed analysis of the companies' procedures will provide a basis for development of conventions which will improve the present procedures for linking establishment and company data.

(c) A study is presently under way with the Financial Statistics Branch on the relationship between the financial returns submitted to DBS on its various surveys. In some cases, current financial data are available only for groups of related companies whereas less frequent returns are submitted for the separate constituent companies. Continued examination is required to provide satisfactory links between these series. At the same time, these studies provide information about company financial records which assist in linking them with establishment data.

(d) Studies are undertaken in co-operation with the various industrial censuses and related surveys to facilitate the linking of establishment data obtained from different sources. If the information obtained from the establishments of each company on different surveys are not additive for the company as a whole, then the task of comparing establishment and company returns is rendered very difficult, if not impossible. Examination of the design of questionnaires and of tabulating procedures is undertaken with a view to improving intersurvey comparability. In this connection, the section has participated in a review of the schedules of various Bureau Divisions with continuing advice from the Canadian Institute of Chartered Accountants.

(e) A study was made this year of the practices followed by various annual DBS surveys with respect to compiling data for company fiscal years that do not correspond with the calendar year. As a result, a procedure has been recommended to standardize the handling of such returns in order to render the data from various surveys more comparable with respect to the time period covered.

automation, one or more of the following: increase the reliability of statistics; improve their timeliness; and/or reduce the cost of compiling them. Most of the work of the Staff can therefore be grouped around the projects of the different subject-matter divisions.

Census Division Projects - During the year, the Staff participated in the final determination of the methodology to be used for the 1971 Census. A decision was reached, after extensive studies and consultation, that most of the census information will be collected on the basis of a 1 in 3 sample. A decision was also reached to confirm earlier plans with respect to the use of self-enumeration with follow-up: in most areas of the country, households will be asked to complete their own census questionnaires (which will be followed up by the Census field staff wherever necessary). A trial census was carried out in three areas of the country which confirmed the practical feasibility and soundness of this method for which the original impetus was based on theoretical considerations.

One of the main innovations of the 1971 Census will be the extensive application of quality control designed to control and reduce the errors accumulated during the processing of the census data. Four areas of the census operation will be subject to formal methods of quality control: (1) printing of census questionnaires; (2) enumeration (the quality control plan here will primarily concentrate on ensuring that all the essential information that is supposed to be collected is, in fact collected); (3) quality control of office coding; (4) quality control of document readers and other associated operations. The second and third of these plans were tested out during the 1969 Trial Census and proved to be generally successful. The fourth plan was also tried out during 1969 but, due to general problems encountered with the document reader, it could not be adequately tested. The application of quality control to the 1969 Trial Census indicated that several minor modifications should be incorporated into future quality control plans of this kind. Many of these will be included in the final plans for the 1971 Census.

Sampling and Survey Research Staff

The prime responsibility of the Staff is to work on the methodology of DBS surveys, design new surveys or redesign existing ones, advise and participate in their implementation and devise general computer systems capable of carrying out a particular aspect of the processing of several surveys. The objective of such work is to achieve, through the application of sampling, improved survey methods or

Much of the work of the Staff during the fiscal year was concentrated in the area of planning a detailed programme of evaluation for the 1971 Census. The three largest evaluation projects are the Reverse Record Check project, designed to estimate the coverage errors (number of people missed) in the 1971 Census; the Response Variance Study, designed to estimate the contribution to census errors of errors of response; and the Agriculture Quality Check project, designed to estimate the errors of the Census of Agriculture.

The Reverse Record Check project has previously been carried out in connection with the 1961 and 1966 Censuses. It is planned again, with some significant modifications, for 1971. The project is based on a sample of persons from sources independent of the 1971 Census (primarily from the 1966 Census updated by a sample of records of births and immigrants). During 1971, the address as of the census date of each selected person will be determined, using an extensive tracing operation, involving several waves of mailing and field follow-up; then the 1971 Census records will be searched to ascertain the proportion of persons missed by the census. Three new features of the study (in comparison with 1961 and 1966) will be the following: the sample will be increased fourfold so as to permit the estimation of the proportion of missed persons broken down by age and by province; some substantive information will be collected for persons who appear to have been missed by the 1971 Census, in order to permit the analysis of the characteristics of people missed by the census and to estimate the impact of coverage errors on substantive Census tabulations; and a new method of tracing the current address of selected persons have been devised which is expected to result in a considerable reduction of the cost per selected person (in fact, most of the additional cost of increasing the sample size for the project in comparison with 1961 and 1966 will be financed through this reduction in unit costs). The new method of tracing current addresses was tested during the 1969 Trial Census and was found to be successful. A complete network diagram for the scheduling of the activities involved in this survey has been prepared and the outline of the processing system was begun.

During the 1961 Census, a pilot project was carried out to measure the response errors of census statistics in a local area and this study, together with theoretical considerations, had a determining impact on the methodology of the 1971 Census. The study conclusively showed that response errors can be significantly reduced through the use of self-enumeration techniques. The 1971 Response Variance Study will be the first attempt in Canada to measure the response errors of census statistics at a national level. A random sample of areas will be selected in which the measurement of response errors will be carried out. This study is therefore designed to confirm (or otherwise) the correctness of the decision to use self-enumeration. In addition, it is also designed to provide further insights into the sources of response errors (which might be used to further improve the methodology of future censuses) and to provide users of census data with estimates of the reliability of census statistics. During the last year the sample design for

this study and the methods that will be used to estimate the response variance have been determined. Work to outline the manual and computer processing of the data has begun.

The 1971 Agriculture Quality Check project is designed to provide a coverage check on the 1971 Census of Agriculture, i.e. to provide estimates of underenumeration of the number of farms and of acreages under major crops. This will be achieved through the selection of a sample of areas which will be enumerated using more intensive methods than those that can be used in a national census. The estimates derived from the survey will be compared with the census estimates to determine the errors of the census. This survey is also used to collect additional information not collected as part of the census but required at national and provincial levels by our users. In fact, without this survey the additional information would have been collected as part of the 1971 Census of Agriculture, which would have significantly increased its cost and the burden placed on respondents. A detailed network diagram is being produced to facilitate control of all aspects of this complex project. Work has begun on the outline of the manual and computer systems required for the processing of the survey.

A new project was begun during the year to test the feasibility of establishing and currently updating a register of urban addresses. A register of urban addresses can be established in machine-readable form as a by-product of the 1971 Census. The project is designed to test the feasibility of updating such a register intercensally. It appears that updated information with respect to new construction might be obtained from the Central Mortgage and Housing Corporation; and with respect to demolitions, through occasional field checks using postal carriers in co-operation with the Post Office Department. If an urban address register could be established and maintained after 1971, it could be used to mail out census questionnaires in 1976 and in subsequent censuses, thereby significantly reducing the field costs of the census; it could also be used as the sampling frame in urban areas for Labour Force Survey and other current household surveys; and, finally, it could be used as a substantive information system by itself concerning the changes in our housing stock. The present pilot project is designed to test the feasibility of this approach and is carried out in five areas: Sherbrooke, St. Catharines, Montreal, Toronto and Vancouver. The first two areas were locations of the 1969 Trial Census which is therefore used as the source of the initial Address Register. The latter three cities were sampled for the purposes of this project and a register of addresses established in the selected areas, using a special field

enumeration. Liaison with the Central Mortgage and Housing Corporation and the Post Office Department has been carried out and their co-operation has been secured. Work has begun on the establishment of a detailed network diagram for the control of this project and the clerical and computer processing systems are currently being outlined.

Labour Force Survey - The ongoing programme of producing variance estimates for 40 characteristics estimated by the Labour Force Survey, by province, region and for Canada, has been continued. These variance estimates are used to provide users of Labour Force Survey data with an indication of the reliability of the published estimates and they are also used to provide a continuing feedback into the survey concerning the errors incurred.

Work has begun in a thorough examination and analysis of the sources of coverage errors (non-response, failure to include in the survey people who should be included, etc.).

Agriculture Division - During the year under review, the Staff continued to give advice on the improvement of estimation procedures for cattle surveys in Alberta and hog surveys in Ontario. In both these surveys, the sample design, based on stratification by area and size of farms, has been found to provide estimates with adequate sampling error for major inventory items. The main source of errors for these surveys might be, however, the high level of non-response. In order to check on the impact of non-response on the reliability of these surveys, field follow-ups were carried out in Ontario and Alberta to collect information from farmers who were non-respondents in the original mail survey. Due to the relatively small budget available for the field follow-up, the sample size was small and, hence, no firm conclusions could be drawn; the problem still requires investigation on a larger scale.

During the year under review, the Staff also collaborated with the Agriculture Division in designing sample surveys for estimating poultry numbers (laying hens) in Nova Scotia and Quebec. These surveys are carried out by mail and are still under experimentation. Advice on sampling design and estimation procedures has been given on a field survey for forage crops which was fully implemented in Alberta and for a survey of rapeseed stocks held by farmers in the Prairie Provinces which is now in progress by mail.

Domestic Travel Survey - As reported in the previous *Annual Report*, in September 1968 Treasury Board had approved in principle a

comprehensive Domestic Travel Survey for 1970-71 which had been proposed at the 1966 Federal-Provincial Tourist Conference. The objectives of the survey would be to identify the patterns and to quantify the values of inter- and intra-provincial travel in such locality depth as is practicable.

As part of the plan for this survey a Domestic Travel Section was established within the Sampling and Survey Research Staff, charged with designing the survey (to be carried out in 1970-71); drawing up, in consultation with the Provincial Liaison Staff and the Office of Tourism, specifications for a private firm to carry out the field work for this survey under contract to DBS; and providing supervision for the contractor on behalf of DBS.

During the year under review, plans had been drawn up for carrying out a pilot survey for the main Domestic Travel Survey. Specifications have been established for tendering the field work. Tenders were called for and evaluated, and the successful bidder was determined. Under the supervision of the Domestic Travel Section and using the sample design established by it, the successful bidder carried out the field work for the pilot survey. The results of the pilot survey were analysed by the Staff and the final plans for the main survey have been established.

Unfortunately, the federal-provincial arrangements for the financing of the main survey did not materialize as expected. Consequently, the survey has been cancelled. Plans are currently under way, in consultation with the Office of Tourism, to draw up specifications for a new survey on a smaller scale.

Merchandising and Services Division - The new design of the monthly Retail Sales Survey, referred to in the last *Annual Report* was completed, along with enough of the underlying computer systems work to make firm plans to implement the new design in June 1970. The new survey will be run in parallel with the old one for the remainder of 1970 and the Staff will be involved, along with subject-matter personnel, in evaluation and analysis of the results with a view to replacing the old survey.

The Staff has continued to be involved in planning the methodology and systems for the next Census of Merchandising. This involvement will increase as plans become more detailed.

The Staff assisted in implementation of the design referred to in the previous *Annual Report* for the 1968 Retail Commodity Sales Survey and in the management of the survey in accordance with the network diagram also referred to there.

Prices Division - A new project was launched during the year designed to accomplish the automation of the Industrial Selling Price Index and to provide further experience in general concerning the automation of surveys. Members of the Staff participated significantly in the work of an interdivisional team charged with the responsibility for developing computer systems for the collection and processing of data for the production of the ISPI. This team was also asked to evaluate and report on the team approach to this kind of project. It is expected that the automation of this survey will significantly increase the ability of Prices Division to service user requests for special tabulation, will enhance the analytical capability of the Division through the provision of new types of tabulations not currently produced and will improve the timeliness of the published price statistics.

Labour Division - Employment and Payrolls Survey - Large Firms (ES 1): Firm, detailed specifications were written for the automation of this survey and the Staff continued to be involved with the systems analysis of these specifications, subsequent programming, and with development and supervision of the network diagrams designed to control the activity. The new ES 1 system will be operational in the first half of 1970-71. It contains a number of technically interesting innovations, primarily aimed at improving the timeliness of the published statistics, which will be watched and analysed in 1970-71.

Employment and Payrolls Survey - Small Firms (ES 2): The last *Annual Report* stated that Sampling and Survey Research Staff had proposed the collection of these statistics as part of the Job Vacancy Survey. This proposal was accepted and in 1969-70 the methodology and systems requirements were worked out and specified in detail. The new systems will be implemented in 1970-71.

Job Vacancy Survey: This survey became fully operational in 1969-70, although much remains to be done in the way of increasing both its statistical efficiency and its operational efficiency. The Job Vacancy Survey organization will be the vehicle for the collection, during 1970-71, of statistics on training in industry. This will be a large and complex survey, the methodological groundwork for which was laid in 1969-70 with the intensive participation of Sampling and Survey Research Staff.

Manufacturing and Primary Industries Division - The project for automating the Census of Manufactures was the subject of extensive planning during 1969-70. The Sampling and Survey Research Staff is currently involved in drawing up the logical framework for

the edit and imputation modules, and it is expected that initial specifications for these modules will be ready in late 1970-71.

Transportation and Public Utilities Division - Preliminary testing of procedures for a Survey of For-Hire Truck Commodity Traffic was carried out in early 1969-70. This testing affirmed that the concepts and procedures were workable, so a major pilot study was designed and launched. This pilot study was designed to provide information which would facilitate making decisions with respect to a possible main survey. The information from the pilot survey would be available in time for the main estimates in September 1970. The decisions would be (a) whether ongoing studies should be undertaken starting in 1971, and (b) what sample sizes and design would provide optimum information in relation to costs.

CALURA - Some preliminary analysis of automation requirements was carried out. This work was suspended to await decisions by the Department of National Revenue on more direct availability of tax return data in machine-readable form.

Central List Extension Project - Much of the fundamental systems analysis for this project has been completed, and a start made on the detailed analysis of the first component. Concurrent with this, experiments have been undertaken leading towards the development of an effective record linkage facility for matching the identities of business units. In the coming year it is anticipated that the manpower attached to this project will be increased, with a resulting more rapid progress towards completion.

Geographically Referenced Data Storage and Retrieval System (GRDSR) - The immediate objective of this project is to enable the Census Division to provide population and housing tabulations from the 1971 Census by any user-specified area. This will be achieved by assigning to each household the geographic co-ordinates of the blockface centre points in which the households are located, in the 12 largest metropolitan areas; and by assigning to each household the geographic co-ordinates of the appropriate enumeration area centre points in the rest of the country. Users will be permitted to delineate the query areas for which tabulations are requested on a suitable map, the co-ordinate points of the specified boundaries will be determined, and the requested retrieval and tabulation will be performed for all blockface and enumeration area centre points within the specified area.

This project can be described in three major phases. In the first phase, Area Master

Files are developed describing every blockface in terms of street names, blockface address range and blockface centroids, etc. in the urban areas, and in terms of enumeration area numbers and corresponding centre point co-ordinates for the rest of the country. A versatile street map plotting programme has been developed within the context of this phase to produce street maps to different scales and with different amount of details from the Master Files produced for the metropolitan areas. The metropolitan areas in which blockface geocoding is expected to be available in 1971 are as follows: Halifax, Quebec, Montreal, Ottawa, Toronto, Hamilton, London, St. Catharines, Winnipeg, Calgary, Edmonton and Vancouver. As to the extent of the coverage within a metropolitan area, this will always include the core areas, while the inclusion of the outlying areas will depend on the availability of accurate maps, the presence of civic addresses and the availability of DBS resources to handle the initial clerical work to produce an Area Master File.

Phase 2 of the GRDSR system provides for accepting the census file or any other survey of administrative data file with addresses and for providing the appropriate blockface or enumeration area centre point co-ordinates either through blockface address ranges or through enumeration area codes with the aid of the corresponding Area Master Files. Addresses which are in free format are first standardized by an address decoding programme which has a better than 90 per cent resolution power. Work is currently going on to provide for verification of municipality and street names and to correct automatically keypunching and misspelling type errors in the decoded addresses. A special procedure to assign geographic co-ordinates was developed for the 1971 Population Census in order to eliminate the need for keypunching some 3 million addresses from the Visitation Record. A system with properly balanced manual and machine intervention permits us to reduce the input to keypunching a blockface identifier and the corresponding enumerated Household number ranges. Upon having assigned the appropriate co-ordinate values to the address, a generalized programme transfers the co-ordinate values to the appropriate record in the census or survey data file. The geocoded data file is then compressed, segmented, converted and stored on a random access storage device.

In Phase 3 of the GRDSR project a flexible data retrieval and tabulation system has been developed. This system is simple enough to permit non-computer programmers to specify their data retrieval and tabulation requests. It performs these requests efficiently. It permits the specification of summaries of data, and cross-tabulations of data in any combination. It also permits the

specification of any combination of contiguous and non-contiguous areas in the queries.

Prototypes, or working models, of the above-described programmes and system have been developed and tested. The work currently going on is aimed at the final implementation of the individual programme elements in Phases 2 and 3, and at the integration of the entire GRDSR system to create a smooth production environment. DBS has now approved the concept to make the entire GRDSR system, or parts of it, available to the three levels of government, if so requested. The interest in assigning geographic co-ordinates to address-data files to facilitate retrievals by arbitrary specified areas appears to be gaining momentum, and by DBS making available this system, the duplication in development work is avoided and thereby the financial and manpower resources become better utilized.

Development of Generalized Programmes - Hundreds of different surveys are conducted by DBS annually. The data processing for many of these surveys is now performed on computers. Most of these data processing operations can be classified into broad functional categories. Within these categories, editing and imputation, updating, sample selection, questionnaire labelling, retrieval and tabulation, etc. are typically performed. In each of these functional categories the data processing and manipulation operations can be performed in many different ways, although it is practical now to specify a number of options and facilities to perform the majority of the potential applications. The concept behind the development of generalized programmes is that the specification that needs to be performed be permitted to be written in either a problem oriented format or in the form of control cards by non-programmers. The advantage of this arrangement would be that after having produced a file design by a computer systems analyst, a suitably trained person could specify the required data processing actions within the scope of the generalized programme without the knowledge of computer programming. This arrangement would significantly reduce programming development time and in addition would permit various experimentations to test different ideas and approaches.

The first operational versions of two generalized programmes, one which performs editing and imputation, and the other one retrieval and tabulation, have been implemented to date. In the edit programme for a declared file format a list of possible values which any or each field could contain may be specified, data fields within a record may be checked for internal consistency, specification can be given to replace values in fields by pre-specified or computed quantities and records can be omitted under specified conditions. A manual instructing non-programmer

users on making edit specifications has been produced and the understanding and use of this can be learned within a few hours time. This generalized programme has been tested by writing edit specifications and performing editing work on several files and it has been demonstrated that the time period between the conception and completion of the editing work can be greatly reduced. The first version of the other generalized programme performs retrieval and tabulation from files consisting of fixed record lengths. A manual has been produced to instruct the non-programmer user on the use of this generalized programme. This generalized programme permits the access, retrieval and tabulation of any combination of data fields and also the performance of various arithmetic operations, such as, multiplication of a field with a weight, or calculation of average, etc. This generalized programme has also been tested by retrieving from several files; it performs efficiently, can be used by non-programmers and in many cases has produced the desired tabulations on an overnight turnaround.

Other Projects and Assignments - During the year the Sampling and Survey Research Staff issued four numbers of a Quarterly Bulletin designed to acquaint interested non-technical persons with its activities. The Bulletin reports on projects under way or successfully completed. It is widely distributed within the Bureau and also to interested personnel in statistical offices of other countries.

Advanced lectures on sampling theory and introductory lectures to subject-matter statisticians coming from many divisions of the Bureau continued to be given during the year under review.

As in previous years, the Staff provided significant consulting services with respect to survey design and methodology, to a large number of federal and provincial departments. Due to the increasing interest in this kind of service, a special unit has been created within the Staff, charged with responsibility for providing consulting advice in survey design and methodology to federal and provincial departments. The work of this unit is expected to be financed through the arrangements of the revolving fund.

Econometric Research Staff

The Econometric Research Staff conducts research and provides consultative services to various DBS subject-matter divisions on the application of econometric and related techniques to the production, analysis and improvement of DBS data. In addition, it works in close co-operation with some of the research groups in other government departments.

During the 1969-70 fiscal year continued emphasis was placed on the use of econometric and related techniques to improve the timeliness and/or the quality of various series produced by the DBS Staff members who worked on projects which included the earlier estimation of various components of the quarterly national accounts, the analysis of the quality-timeliness trade-offs involved, and the writing of computer programmes to automate the production of these accounts. Considerable work was also done on streamlining the national accounts methodology so as to facilitate the production of monthly estimates of these accounts on a continuing basis, and an improvement in the timeliness of the quarterly national accounts.

A programme was developed to produce several analytical measures of industrial structure by Standard Industrial Classification group and market area for different units of organization and concepts of size. This programme helps to meet current pressing demands for information on industrial structure and facilitates the production of the various measures on a continuing basis.

Much progress was made on projects which were started prior to the 1969-70 fiscal year. KEARS (KWIC Economic Article Reference System) was completed. This system was designed to provide quick reference to titles of journal articles on specific econometric problems and applications. It currently includes articles from eleven of the leading economic journals for the eleven-year period 1958-68, and there is provision to have it updated and expanded to include more journals.

Most of the data required for making an assessment of the usefulness of "hedonic" price indexes in the development of construction price indexes have been assembled; and, three other projects: an evaluation of DBS' capital stock estimates for manufacturing, an analysis of the determinants of hospital costs in Ontario, and the development of methods for estimating and updating the coefficients of input-output tables, are in the final stages of completion.

Towards the end of the fiscal year the Medium Term Interdepartmental Simulation (METIS) Model Project was initiated. Some staff members are being involved in the systems design as well as in the specification and estimation of the model.

Regional and Manpower Research Staff

Two previously separate staffs - Regional Statistics, Research and Integration and Special Manpower Studies and Consultation - have been brought together to form Regional and Special Manpower Research Staff. The

Regional Staff is responsible for developing, or co-ordinating research programmes designed to improve and extend subprovincial statistics to serve the needs of various federal, provincial and municipal governments. The Special Manpower Staff carries out analytical and development work in the area of manpower and labour markets.

The extension of subprovincial statistics is achieved by suggesting conceptual and procedural changes required to make the results of national surveys and censuses available on a small-area basis, by investigating the statistical content of administrative files and by undertaking programmes of data estimation for small areas based on available sources. Improvement of existing small-area series is pursued by carrying out research of concepts used and by automating procedures wherever desirable in order to improve accuracy and timeliness.

The Staff is currently engaged in the development of population, migration, labour force, employment and unemployment estimates for small areas.

On the manpower side, main efforts have been concentrated on the programme of analytical studies utilizing household survey data. Studies initiated or completed during the year include such topics as underutilization of manpower, labour mobility, multiple-job holders and overtime work, and cyclical variation in labour force participation rates. Developmental research has taken new directions as its focal point, the Job Vacancy Survey, approaches the operational stage. Some preparatory work has begun on developing measures of current employment by occupation: a necessary complement to the occupational data on job vacancies. At the same time, a long-run

project has been instituted to analyse, evaluate and interpret the job vacancy statistics in close collaboration with the Labour Division.

Central Planning and Programming Staff

To assist in the implementation within DBS of the Treasury Board's planning-programming-budgeting approach to resource allocation, a small central planning and programming staff was appointed early in 1969. Under the general direction of the Assistant Dominion Statistician (Integration and Development), and in close collaboration with other senior officials, this Staff is responsible initially for developing systematic approaches for the clarification of over-all DBS objectives and developing planning procedures to ensure their attainment.

Consultant on Demographic Research

During the year under review, the Consultant on Demographic Research conducted research on the delineation of Census Metropolitan Areas for the 1971 Census Metropolitan Area Committee and served on several Census Division Committees concerned with the planning of the 1971 Census. He chaired interdivisional committees concerned with projections and with research on vital statistics. He has also acted as Assistant Director of Research in the Census Division. He completed and published the 1961 Census monograph on internal migration, completed revision of the French translation of the 1961 Census monograph on urbanization and provided consultation on various demographic matters to several governmental and private agencies.

ECONOMIC ACCOUNTS BRANCH

This Branch is concerned with a wide range of economic statistics which include the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below is carried out in the Balance of Payments and Financial Flows Division, the National Income and Expenditure Division, the National Output and Productivity Division and the General Time Series Staff. The scope of information covered by the Branch extends over the whole ambit of the organized output of the Dominion Bureau of Statistics and beyond, providing a set of macroeconomic data relating to the Canadian economy. The data are used by economists and others concerned with observing

the course and performance of the Canadian economy and advising on policy.

Balance of Payments and Financial Flows Division

The Balance of Payments and Financial Flows Division is responsible for the construction, analysis and publication of statistics and reports related to two important sets of economic and financial relationships. The first of these involves estimates of balance of payments covering economic and financial transactions between Canada and other countries and estimates of Canada's international investment position measuring the country's

external assets and liabilities. The second set of relationships is embodied in a comprehensive set of financial flow accounts setting out intersectoral claims and revealing the process by which real and financial resources are transferred within the Canadian economy. In addition, the Division is concerned with the publication of statistics on international travel, covering both Canadians travelling abroad and non-resident visitors to Canada.

The publication programme of the Division included the quarterly reports on the balance of payments, monthly reports on sales and purchases of securities between Canada and other countries, and monthly and annual reports covering travel between Canada and other countries. Although an annual report on the balance of payments was not published, the principal series of international investment and foreign ownership and control of Canadian industry were published as they became available in the regular quarterly reports.

During the year the first report on the financial flow accounts was published, covering the years 1962-1967, and subsequent quarterly reports updated these to the third quarter, 1969. These accounts show the net changes in assets and liabilities of about 35 sectors and subsectors of the Canadian economy broken down into approximately thirty transaction categories. In many cases the surveys which provide the material for these accounts, and which are undertaken in other Divisions of DBS, were designed with the specific requirements of the financial flow accounts in mind.

In line with the general Bureau policy of improving the timeliness of release of key statistical series, commencing in the third quarter of 1969, first estimates of the Canadian Balance of Payments in summary form were released approximately six weeks after the end of the reference period and five weeks before the release of the detailed report. It is planned to continue the release of this advance information in the DBS Daily.

There was continuing close co-operation with the Office of Business Economics of the United States Department of Commerce particularly concerning the joint efforts to explore and explain apparent inconsistencies in the data collected in the two countries.

In 1969, at the invitation of the International Monetary Fund and the Organization for Economic Co-operation and Development, experts from the Division participated in meetings covering new developments and changes in balance of payments statistical reporting, the preparation of a collection of internationally comparable financial statistics and the measurement of aid to developing countries.

The International Travel Section of the Division increased its coverage of the flow of international travellers by survey of those people entering Canada by pleasure craft -- a small but growing segment of the international travel scene. Unsettled conditions in the international exchange money markets, balance of payments problems in some of the principal trading nations of the world and the continuing fight against inflation focussed particular attention on both balance of payments statistics and financial flow accounts during the year.

National Income and Expenditure Division

Organizational changes within the Economic Accounts Branch resulted in the change of the National Accounts Section into a Division called the National Income and Expenditure Division.

The Division is responsible for the construction, development, analysis and publication of the quarterly, annual and historical National Income and Expenditure Accounts including National Income, Gross National Product and Gross National Expenditure aggregates. This system of information also includes such supporting sets of economic statistics as sector accounts, value of production at constant price, geographic distribution of personal income and others. The economic statistics generated in the Division are widely used by both public and private sectors in evaluating the national, regional and sectoral economic performance and developments. They are also used in various areas of economic research, for forecasting and for policy formulation in practically all segments of the economy.

In addition to the ongoing activities of the Division, there have been two major accomplishments during the fiscal year under review -- the introduction of a speed-up in the release of reports and the historical revision of the National Income and Expenditure Accounts.

Increased efficiency in information analysis accomplished through automation and the research efforts of a small group of experts who have been entrusted with speeding up the release of reports has resulted in a significant gain in the timely release of major economic indicators. From the third quarter of 1969, the Income and Expenditure Accounts have been published approximately 45 days after the reference quarter, a gain of about 30 days compared to the old system.

After a period of several years of intensive effort, work has been completed on revised National Income and Expenditure Accounts from 1926 to 1968 on an annual basis. Work towards the completion of the historical

revision of the accounts covering 1947 to date is well under way and the estimates are expected to be published in the next fiscal year. The historical revision incorporated statistically revised data as well as certain conceptual improvements, particularly those designed to bring the Canadian National Accounts System closer to the United Nations Standard System of National Accounts.

Close collaboration with the statistical office of the United Nations was maintained and the Branch also actively participated in the work of the International Association for Income and Wealth.

National Output and Productivity Division

Within the newly formed National Output and Productivity Division, which is responsible for the construction, analysis and publication of output data by industry in constant prices as well as measures of productivity, the Productivity Research and Analysis Section continued its work on developing and establishing output per labour input measures for the Canadian economy, its main sectors and selected individual industries. In the series *Productivity Trends and Industry*, Report No. 2 covering *Iron and Steel Mills* for the period 1959 to 1968 was released. The Industrial Output Section made major timing gains in the release of the *Quarterly Industry of Origin Real Domestic Product* series during 1969-70. Major progress was also made in the development of monthly RDP Indexes and these more timely series will be published during 1970.

This Section also undertook a number of research pilot studies within Federal Govern-

ment Departments during the year as a first step in developing more meaningful output measures for non-commercial service industries.

General Time Series Staff

The General Time Series Staff is responsible for the publication of the Canadian Statistical Review, general times series research and CANSIM, the computerized time series data bank.

During the fiscal year, emphasis was on the implementation of Phase I of CANSIM. Essentially Phase I consists of the conversion of existing tape files to the new disc-oriented system. In July, jointly with the Economic Council, DBS announced public sale of machine-readable data. At the year-end there were approximately 14,000 series in the base. Part of CANSIM Phase II development also started was the development of specifications for an integrated, simplified English-type language for data manipulation.

The publication programme of the *Canadian Statistical Review* weekly and annual supplements continued. Editorial changes, reflected in the January issue were made to improve the readability and usefulness of the publication.

The volume of seasonal adjustment in DBS continued to expand throughout 1969 with a resulting growth in the training and advisory role played by this staff. This role has also expanded to cover support and advice on data manipulative computer routines related to seasonal adjustment and to CANSIM.

FINANCIAL STATISTICS BRANCH

The Financial Statistics Branch consists of the Director General, the Co-ordinator of Financial Statistics Staff, the Business Finance Division, the Corporations and Labour Unions Returns Act Division and the Governments Division.

The Financial Statistics Branch is responsible for the production of financial statistics dealing with both the public and private sectors of the economy and, in addition, for a number of non-financial statistical series having a closely related bearing on the over-all financial statistics programme.

The Co-ordinator of Financial Statistics includes among his responsibilities, advising on the development of new financial statistics and the integration of new and existing series

within DBS and between DBS and the other parts of the federal and provincial government structures. The objective is to meet the demands of the users of financial statistics as efficiently and completely as possible.

It should be noted, however, that a number of important financial series are located elsewhere -- in the Balance of Payments and Financial Flows Division of the Economic Accounts Branch, and in the Co-ordinator, Consumer Finance Research Staff of the Socio-Economic Statistics Branch.

Business Finance Division

The statistical programme of the Business Finance Division centres around three related

but widely diverse areas: Statistics of investment intentions and related activities have been in existence the longest of these three areas. These statistics include capital and repair expenditures, as reflected in business intentions as well as actual expenditures, residential housing starts and completions as well as value put-in-place, building permits, the construction industry and statistics on the stock of capital in the form of fixed assets. The profits earned from and the financing of economic activity, -- the second area while holding considerable interest for economic analysts, has not been represented in the statistical programme to any significant degree until recently. The third area has to do with scientific research and development, an activity that leads to economic and industrial advancement.

In the area of capital investment, annual surveys of capital and repair expenditures are being continued and provide national, regional and industry estimates of capital formation as well as repair expenditures made to the existing stock of fixed assets. Investment intentions are published by industry and by province in *Private and Public Investment Outlook*, early each year, to provide information on construction plans as well as intended expenditures on machinery and equipment. A second survey of spending intentions is carried out during the middle of the year and these revised intentions are published in *Private and Public Investment, Mid-Year Review*. This survey was expanded in 1967 to permit the publication of spending intentions by industry by province. With this information now available for several years, it is possible to assess the ability of businessmen to provide spending plans by province, that can be reliably converted into realization. If the spending plans are not realized with some degree of certainty, the value of the plans as statistical information is in doubt.

The quarterly survey of investment intentions and realizations of spending plans, initiated in 1968, is progressing favourably. The implementation of the basic sample was continued during 1969 and is expected to be complete during 1970. Additional units added to the sample in future years will be more selective, to provide improved representation in specific industries and geographic regions.

In addition to the construction data provided in the investment reports, which show expenditures on new and repair construction as reported by organizations paying for the work done, another report *Construction in Canada* published in June of each year provides information on value of work put in place by type of structure, along with over-all estimates of the labour and material content of this work. This report also provides sepa-

rate estimates for value of work performed by construction contractors and that portion performed by others engaged in construction work on their own account. Also included are estimates of the equivalent man-years necessary to carry out the annual progress of construction. Information on types of structure is derived from the capital expenditures surveys mentioned earlier, which also obtain information on the labour and material content of own-account construction. The labour and material content is derived from the results of a sample survey of construction firms conducted annually.

The detailed investigation of the construction industry begun in 1967 is being continued. The first publication in this series *The Mechanical Contracting Industry* was released during the year. A second group is being developed, *The Electrical Contracting Industry*.

Reports on building permits issued by municipalities in Canada are published monthly with an annual summary. These publications provide data on the number and value of housing units by type and the value of industrial, commercial, institutional and government building construction in more than 1,400 municipalities in Canada. A monthly report, *New Residential Construction*, contains the results of a nation-wide survey by the Central Mortgage and Housing Corporation, providing data on dwellings started, under construction and completed. These physical measures of housing construction activity are translated into values for the purpose of estimating quarterly and annual residential capital formation.

In addition to the production of current housing and building permit statistics, development work has been undertaken to improve the quality of housing statistics provided for past periods. In addition to improvements in the physical count of housing units, an improved measurement of the expenditures made for housing, by quarter, has been developed. This measure not only provides a measure of housing activity but indicates the volume of construction activity involved in residential construction.

Development work has continued in the improvement and extension of the estimates of fixed capital flows and stocks. The basic publications in this series were released by the Dominion Bureau of Statistics in 1967 and regular issues have not been considered necessary since that time. Efforts have continued, with interested users of these data, to develop a basic information file of punched cards and computer tapes. This form of information distribution has proved to be advantageous to the user. The fixed capital stocks data are now largely available for all

sectors of the economy, in current, constant (1949, 1957 and 1961 time basis) and original cost dollars for the period 1926 to date.

Surveys of the financing plans and structure of financial and non-financial corporations in Canada have been continued. The publication *Financial Institutions* provides information on the major financial intermediaries in Canada. Development work is continuing to provide data for the groups not available currently. Development of financial statistics of industrial corporations including income and expenditures, profits, dividends and balance sheet information, was continued.

Regular surveys on scientific research and development are carried out: one of the federal government's activities, and one of industry. The objective of these surveys is to provide information on the resources (money and people) devoted to science in Canada. These surveys have been confined to the physical and life sciences. However, there has been a growing interest in recent years in comparable information in the social sciences. Accordingly, an investigation into this area has been initiated to determine the problems, costs and benefits involved in surveys of the social sciences.

Corporations and Labour Unions Returns Act Division

The Corporations and Labour Unions Returns Act Division is responsible for the annual compilation and analysis of corporation financial statistics for the Canadian economy including operations, balance sheet, profit, income taxation and statistics relating to the ownership of a group of the larger corporations. The passage of the Corporations and Labour Unions Returns Act in 1962 required the establishment of a new programme within the Dominion Bureau of Statistics to examine the extent and analyse the effects of non-resident ownership of larger corporations in Canada and the extent and effects of the association of organized labour in Canada with international unions. The magnitude of these international associations has been established in broad terms in the annual reports required under the Act.

In 1965, amendments to the Corporations and Labour Unions Returns Act permitted the extension of the analysis of corporation financial activity to all corporations in Canada. The programme developed and implemented for corporation fiscal years beginning in 1965, was an extension of the corporation financial statistics programme carried out by the Department of National Revenue for some years and published in *Taxation Statistics*.

An extensive programme to integrate the compilation and analysis of corporation financial, taxation and ownership data resulted, during the fiscal year 1969-70, in the release of eleven reports, and brought the Division's publication programme to a more timely basis. These reports were as follows: *Corporations and Labour Unions Returns Act Report - Part I, Corporations - 1965, 1966, 1967; Inter-Corporate Ownership 1967; Corporation Financial Statistics 1966, 1967; Corporation Taxation Statistics 1965, 1966, 1967; Corporations and Labour Unions Returns Act Report - Part II, Labour Unions 1967*.

The latest publications, *Corporation Financial Statistics* and *Corporation Taxation Statistics*, contain an expanded and more detailed statistical analysis of corporation financial structure and corporate taxation than previously available. The Corporations and Labour Unions Returns Act Reports analyse the extent and effects of non-resident ownership and control of corporations in Canada and the extent and effects of the association of Canadians with international labour unions. The report "Inter-Corporate Ownership - 1967" indicates the holdings of more than 10 per cent of the voting shares of a corporation by another corporation, the percentage of shares so held and the country of incorporation of the holding corporation.

Governments Division

During 1969-70 the Governments Division continued its efforts toward the consolidation of its position in respect to its already established programme. No new activities as such were undertaken and the main emphasis was on timeliness and quality improvement in output and on the continuation of developmental work to improve reporting of basic inputs. The principal achievements were as follows:

Early in the year, the feasibility of compiling the quarterly income and expenditure statements on the Government sector for national accounts purposes was carefully researched and subsequently these compilations were completed regularly on a significantly accelerated schedule in keeping with the Bureau's objective of publishing the National Accounts Income and Expenditure series some five weeks earlier than heretofore.

In this connection, prior years' work on the classification of Federal government expenditures by economic objects (see report on the Governments Division for 1968-69) proved to be very valuable. The computer print-outs now available as a direct result of this earlier work allow for the analysis of federal expenditures within thirty days of the end of the reference period.

Another significant accomplishment in this area was the completion of the historical revision (on an annual basis) of this series for the years 1926-1968 and on a quarterly basis for the years 1947-1969.

While no major developments were realized in the area of Financial Flow Accounts, timeliness of the Division's compilations of financial flows for the three levels of government and for Federal and Provincial enterprises was improved by about three weeks and work continued toward the closer reconciliation of this series with the National Accounts Income and Expenditure series. Late in the year considerable resources were assigned to develop ways and means of improving the quality, which is currently lacking in municipal flows series. It is hoped significant improvement will materialize in this area within a year.

During the year under review the production time of five of the Division's twelve annual publications on finance and employment was cut considerably. Time cuts ranged from 170 days to over 300 days. Efforts to improve the timing of the other publications are continuing.

New publication formats for Government revenue and expenditure statements were implemented for the Federal, Provincial and Municipal levels to show more clearly revenues raised from own sources and revenues otherwise derived, and to show more accurately the cost of services provided by government. The publication *Municipal Government Finance* was expanded to include regional financial data, i.e. that on Census Metropolitan and Major Urban Areas.

Plans for 1970-71 include the development of reconciliations between Government

expenditures on a functional basis and those on an economic or national accounts basis.

During the year, the Eighth Federal-Provincial Conference on Municipal Statistics met in two sessions (its 5th and 6th) and concluded the initial phase of its work, i.e. the basic standard systems for classifying local government financial transactions. A manual is now in preparation by the Division and it is hoped this will be available for distribution by mid-1970. This Conference plans to continue its meetings to deal with other urgent matters such as standard reporting forms, terminology, and measures of performance and of efficiency.

As required pursuant to the Federal-Provincial fiscal arrangements, the Division supplied the Minister of Finance with detail on the Provinces' "net general revenue" and on provincial "natural resource revenue". In this connection also, it supplied for "revenue base" purposes detail on provincial sales of alcoholic beverages. This exercise which was concluded during the year in respect of the 1967-68 fiscal year will now comprise part of the Division's regular programme.

Representatives of the Governments Division along with the Director General of the Financial Statistics Branch of the Bureau, at the request of the British Columbia Department of Municipal Affairs, met with officials of all B.C. municipalities to explain to them the work of the Bureau and particularly that of the Governments Division; to help introduce municipal finance representatives to the classification systems developed by the above-mentioned Conference; to explain to the officials the needs for statistical information, and to enlist their co-operation directly or through their Department of Municipal Affairs. The success of this meeting has prompted the Division to consider seriously the feasibility of similar liaison work in the other provinces.

ECONOMIC STATISTICS BRANCH

As the name of the Branch implies, the majority of its activities are concerned with the production of statistics related to the economy of the nation and designed to be of assistance in the formulation of policies and programmes that affect its condition and growth. The Branch directs the operations of six divisions and an "Input-Output" research and development staff. Branch activities are principally concerned with the collection, processing, analysis and publication of statistics derived from business establishments.

These consist, in general, of production, sales and service "units" in contrast to the reporting universe of the Financial Statistics Branch which, so far as the private sector is concerned, deals with companies.

For the most part the collection of the information is carried out by means of hundreds of monthly, quarterly and annual "mail type" surveys of varying sizes although a number of "enumeration type" surveys are also involved. The Branch tends to concentrate on

production or sales of commodities and services, materials used, employment, prices and imports and exports of commodities.

External Trade Division

The External Trade Division is responsible for planning the content of Canada's Commodity Trade Statistics and for their production, analysis and publication. Monthly, quarterly and annual reports and special tabulations provide data on trade by commodity, by country, by province of customs clearance for exports and imports, as well as by mode of transport, by region of lading for exports, and by tariff item by country for imports.

A complete reorganization of work methods employed and of the professional, technical and administrative responsibilities of the Division continues. The addition of several commodity officer specialists and other technical staff made possible many far-reaching improvements in commodity classifications. The facilities for continuous and regular review of these classifications to accommodate expanding and changing needs of international commodity trade have been improved.

In the last annual report, reference was made to an improvement in the ability of the External Trade Division to produce more interpretative and analytical commentary concerning its statistical output due to the addition of qualified professional staff. This improvement has continued during 1969-70 which saw a significant increase in the Division's analytical output.

Additional professional staff required for a comprehensive redesign of the entire production system are being sought. External Trade Division computer programmes are now outdated and contain few if any safety features with the result that they are very vulnerable to operating errors. With the objective therefore of improving not only the timeliness and accuracy of Canada's international trade statistics but also the efficiency of the operation, the professional planning and development function is being strengthened.

Continuous efforts are being made to clear up the backlog of basic annual publications and considerable progress in this direction has been achieved. During the fiscal year the Trade of Canada, Volume I, 1964-1966 edition, Volume II, 1966-1968 edition and Volume III, 1960-1962 edition were prepared, and further editions are under preparation and scheduled for release during 1970. The *Review of Foreign Trade* for 1960-1963 and 1964-1966 will also be published during 1970.

The Division is continuing to devote considerable research and study to valuation problems, particularly those related to Canada/U.S. automotive trade, as part of a broad programme of quality improvement and an over-all reconciliation of counterpart trade statistics of the two countries.

Further efforts are being made by the Division towards more improved timeliness and quality of its total publication programme as well as special compilations and tabulations produced for government and industry, which are required increasingly for quota surveillance, anti-dumping investigation, import substitution, export promotion, etc.

Input-Output Research and Development Staff

In 1969 the Input-Output Staff published two volumes which contained the *Input-Output Structure of the Canadian Economy, 1961*. Some of the data published were preliminary in the sense that final reconciliation had not been made with the revised National Income and Expenditure Accounts. Work on the reconciliation is now complete and will be published in a forthcoming volume. In addition, information concerning detailed breakdowns of the final expenditure categories will be made available.

The publication of the 1961 input-output tables, the description of the methodology and the associated analytical models represents the culmination of an extensive research effort. In order to ensure that the maximum benefit from the effort is realized, the Input-Output Staff is increasing its efforts in two new directions.

On the one hand, the Input-Output Staff is participating in a number of projects all of which are designed to improve the quality of economic statistics at DBS.

On the other hand, the Staff is becoming engaged in more analytical work and is providing more user-oriented services. A considerable effort is being devoted to the development of a medium term simulation and projection model which is being constructed through an interdepartmental project involving the Economic Council of Canada, the Department of Manpower and Immigration, and the Department of Regional Economic Expansion as well as the Dominion Bureau of Statistics.

The Department of Finance has also been invited to participate. As well, technical advice and special data tabulations have been made available to large corporations, researchers at universities, and provincial and federal government agencies.

The Input-Output Staff has also continued its activities related to the construction of input-output tables. During the year a programme for updating input-output tables was initiated. This programme consists of annual updating and deflation of input-output tables by means of extensively automated procedures which involve large amounts of annual data. Plans are now being made for the construction of a new base year table for 1971.

The Input-Output Staff is continuing its work in the area of regional input-output studies in co-operation with the provinces and the Department of Regional Economic Expansion including the updating and analysis of the four Atlantic Provinces' input-output tables.

Labour Division

The Labour Division is concerned with production of a broad and varied programme of establishment surveys and administrative statistics. The subject-matter covered includes statistics of labour input and labour cost, occupational job vacancies, pension plans, and data relating to the operation of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration.

During the fiscal year 1969-70, the Employment Section introduced a computerized method of imputing data for delinquent reporters to the monthly survey of employment, payrolls and hours in larger firms making possible the provision of more detailed preliminary data, the production of seasonally adjusted advance statistics, and the release of advance estimates of total employment and of labour income. As well, the development work connected with the complete automation of the survey continued to the stage of large-scale parallel runs in January 1970. The survey should be completely automated early in the next fiscal year. A significant addition to the survey in 1969 was the collection, for the first time, of the full range of monthly payroll data from educational establishments.

During the fiscal year, estimates of labour income were revised to the 1960 Standard Industrial Classification. The revised series, which are available from 1951 on, incorporate several new sources of data. Revised monthly estimates of employees by province and industry were published giving data from 1961 on. The revision involved extending the industrial coverage of the estimates to the entire non-agricultural sector of the economy.

The results of the second comprehensive survey of selected manufacturing employer labour costs in Canada were published, with a considerable improvement in timeliness from

the similar survey conducted the previous year. These first two surveys have provided a solid, conceptual and operational framework for the collection of national labour cost statistics. It is now planned to obtain data on the components of the wage package in other industries on a cyclical basis. Thus the 1970 survey (relating to 1969 data) covered the mining industry.

The Unemployment Insurance and Manpower Section compiles and publishes statistics reflecting the operations of the Unemployment Insurance Commission and the Canada Manpower Service of the Department of Manpower and Immigration. The fiscal year has been marked by steady progress in computerization. Research has begun on the characteristics of long-term unemployment insurance beneficiaries.

During the year, the Pensions Section negotiated with federal and provincial pension commissions resulting in agreements with Quebec, Ontario, Saskatchewan, Alberta and the federal Department of Insurance for a joint co-operative statistical programme for private pension plans. These agencies will extract data from their administrative records which DBS will use to create a master file of pension data from which tabulations can be run to meet the requirements of the participating agencies. The data are supplemented by surveys in those provinces where co-operative arrangements have not yet been obtained. This use of administrative records as a substitute for surveying employers will reduce response burden on the business community and will provide more comprehensive and timely data.

The fiscal year has seen the Job Vacancy Survey Section develop into a full-scale operational system. The industrial coverage was expanded from manufacturing to the entire non-agricultural sector, the computer programmes were made operational, and a comprehensive staff training programme was developed. The complete system of this twice-a-month survey, including all mail and field interview phases, became operational late in 1969. Since that time, data have been produced for the Department of Manpower on a regular schedule. A start has also been made in assessing the data for technical adequacy and analytic value.

In the Analysis and Development Section, the study of duplication in the field of labour statistics, which had been requested by the Treasury Board, resulted in a report which has formed the basis for a programme to reduce duplication in the collection of labour data by federal departments and agencies. Using the data obtained from the original study, the first official guide to labour statistics was produced. This should be of considerable assistance to researchers and others using labour data.

During the year a study related to the possible development of a programme of industrial accident statistics was completed. This will form the basis for a pilot study planned for next year.

Manufacturing and Primary Industries Division

The primary objective of the Division is to provide useful, timely and accurate statistics in the fields of manufacturing, mining, forestry, fishing and energy. To this end, the Division carries out several hundred surveys of an annual or more frequent nature as well as a quinquennial survey of the primary fishing industry. Results of these surveys are made available to users in the form of publications, special statements, bulletins or special tabulations.

During the past year, emphasis has been placed on the continuation and intensification of efforts to reduce the burden of response, to remove duplication of enquiry and to improve the quality and timeliness of data. In this context, specific reference can be made to the following:

(1) The joint study undertaken by DBS officers and representatives of the Canadian Institute of Chartered Accountants directed towards restructuring of the Census of Manufactures questionnaires so that they will be more in keeping with accounting records. To date, a revised short form for use of "small" establishments has been developed for implementation in the 1970 Census of Manufactures.

(2) The intensive study by a divisional work group of tax returns filed under the Corporations and Labour Unions Returns Act to determine the suitability of the information for use as a supplement to or a replacement for sections of the Census of Manufactures questionnaires. To date, some 6,000 company statements have been reviewed for the tax year 1969. Some benefits have already been experienced in that the information in a number of cases has provided an acceptable base for imputation of missing data or the correction of erroneous data.

(3) The joint study by officers of this Division and those of the Labour Division of the possibility of using monthly employment and payroll statistics as a substitute for similar data collected annually in the Census of Manufactures. To date, approximately one third of the matched computer runs of census and employment questionnaires have been examined and reasons for differences in data established.

(4) The interdivisional study of multi-establishment accounting records to develop a co-ordinated and integrated reporting system

suitable for the provision of (a) establishment and company statistics and (b) statistics of co-operatives.

(5) The study by a multidisciplinary team of the automation of the Census of Manufactures, Mining and Logging. Good progress has been made in developing the system with one module (mailing) scheduled for implementation with the 1970 Census and a second (photoprint) scheduled for the 1971 Census. Finally, some preliminary work has been done on one aspect of the geocoding system: geocoding of manufacturing establishments to permit retrieval of data on user-specified areas for such studies as urban renewal, industrial shifts and geographic concentration of industries.

(6) The development of a probability sample and semi-automated processing of the monthly shipments, inventories and orders survey. Substantial progress has been made and publishable output is scheduled for December 1970.

(7) Active participation by divisional officers in the development of a progress reporting and cost accounting system and a system of planning for DBS. Substantial contributions were also made to the revision of the Standard Industrial Classification, and the development of units of measure for standard use in all DBS publications. Although the interdivisional working group concerned with the development of the commodity classification is nearing completion of its work, the implementation unfortunately must be deferred until the 1971 Census of Manufactures. This is because the 1970 questionnaires had to be printed during the fiscal year due to the impact of the Decennial Census of Population and Agriculture on central services such as forms design and printing.

Despite a decrease in authorized strength of the Division from 202 to 198 and additional demands on existing staff due to more extensive training and heavier work loads, further progress can be reported in timeliness. For example, as of March 31, 1970, 25 publications related to the 1968 Census of Manufactures had been released as opposed to only one for the 1967 Census as of March 31, 1969. Improvements have also been experienced in the release of preliminary data in the DBS Daily. At March 13 of this year, summary information had been provided on 55 industries as opposed to 52 industries as at March 13, 1969. In the case of monthly and quarterly surveys the improved timeliness of published data achieved in recent years has been maintained. Further progress will now depend on improvement in collection patterns and resolution of problems connected with the printing and release of publications.

In relation to the general publications of the Division, i.e. the *Manufacturing Industries of Canada*, additional advance data were released in the DBS Daily this year, but the timeliness of the final publication is still below acceptable standards. It is expected that the situation will improve with the implementation of the revised photoprint programme. Until this is achieved, the Division will concentrate on the early release of preliminary data in special bulletins.

Liaison with industry continued to form an important part of the Division's activities particularly in relation to improvements in timeliness, quality and data requirements. Meetings of many of the existing divisional industry committees were held. In addition, several new committees were initiated in the fields of machinery, energy and foods and beverages; of particular interest is the National Advisory Committee on Petroleum Statistics. This committee of senior industry officials and senior officials of the appropriate federal and provincial government departments has been initiated to develop a co-ordinated and integrated system for all petroleum statistics (production, marketing, distribution).

Reference should also be made to the relationships which the Division has with its users. This can best be expressed in terms of the number of enquiries which are handled. During the year, the Division handled approximately 15,000 requests for information ranging from requests from school children to sophisticated tabulations required by government or industry organizations.

Finally, officers of the Division participated actively in working with and supplying information to international organizations such as the United Nations Statistical Commission, OECD, ECE and the Conference of Commonwealth Statisticians. This ranged from the supply of statistical data to participation in working groups and recommendations related to statistical concepts and definitions.

Merchandising and Services Division

The function of the Division is to collect, process and publish data on the retail, wholesale and service sectors of the economy, as well as to undertake special studies and surveys in areas related to the distribution of goods and the provision of services from primary and secondary sources to the final consumer.

During this fiscal year, virtually all retail and service bulletins for the 1966 Census of Merchandising were released. Many special tabulations of census data were com-

plied for use in answer to specific requests. In spite of continued efforts, it was not possible in this year to publish the 1966 Census of Wholesale Trade. The final computer run is expected to be available in the first half of 1970 and it is hoped that the bulletin will be published in the fall of 1970.

Planning for the 1971 Census proceeded with the organization of a main committee and two subcommittees. The main group reviewed all retail, wholesale and service kind-of-business classifications; revised and rewrote many of them. It also reviewed, with users of the statistics, concepts, definitions and coverage of the various fields, and determined the nature of the data to be collected in the 1971 Census of Merchandising. Final preparation of the questionnaires was also begun. One of the subcommittees on planning the 1971 Census reviewed work procedures, aiming for optimal computerization. The second subcommittee studied the advantages and problems attendant on using a central registry of firms as a possible source of lists to be used as a supplement to field enumeration. All three committees are working to a time schedule to permit adequate time for programming and testing before the census begins.

A complete review of all surveys undertaken during 1969-70 was undertaken and the statistical programme (excluding census) was planned for the coming decade. The review was designed to determine whether each survey should be continued, modified or eliminated. As a result, certain savings in manpower were effected and reallocated to new survey operations, increasing operational efficiency. Another aspect of the statistics programme of the Division concerned quality control. A committee of subject-matter and operations officers was formed in order to devise and implement a formalized quality control system. It is expected that quality control methods will be further modified in the coming year and will result in improved accuracy and data and, possibly, improved timeliness.

Due to the problems experienced in the 1966 Census of Wholesale Trade and the attendant delay in the publication of the Census Bulletin on Wholesale Trade, no annual surveys covering this field will be taken for 1969 and 1970 and all resources were and will continue to be concentrated on the preparation of the 1971 Census. After the 1971 Census, it is planned to revise the wholesale survey programme; the total universe will be divided into two internally homogeneous sections along operational lines and each part will be surveyed in alternate years.

For purposes of historical continuity, the monthly and annual wholesale trade series for the period of 1952-1968 have been revised on the basis of the results of the 1961 Census

of Wholesale Trade and the 1964 (unpublished) annual survey. The publication, *Wholesale Trade, 1951-1968* (Cat. No. 63-515), appeared in April 1969.

The first *Construction Machinery and Equipment* survey (Cat. No. 63-516) was published during the year measuring the 1967 market for about 70 major commodities in quantitative and dollar terms. Because of the lively interest of government departments and business firms it was decided to make this survey an annual feature, starting with the 1969 reporting year.

The monthly *Wholesale Trade* (Cat. No. 63-008), the monthly and annual *Farm Implement and Equipment* (Cat. Nos. 63-009, 63-203) and the monthly *Steel Warehousing* (Cat. No. 63-010) surveys, are the other regular publications prepared by the Wholesale Trade Section of the Division. Apart from continual minor improvements, these surveys have remained unchanged.

The 1969 edition of the *Market Research Handbook* (Cat. No. 63-514) was published towards the end of the 1969-70 fiscal year. The scope of the book has been substantially enlarged over previous editions; it contains a wide array of marketing information based on the data collected by many divisions of DBS and some other federal statistical sources and contains over 640 pages of statistical tables, charts, maps and definitions of terms.

Much of the activity in the area of retail trade centred around the developmental stages of the new monthly retail trade survey, which is expected to become operational towards the latter part of the coming fiscal year. The first of the new monthly retail trade survey bulletins is expected to be the January 1971 report.

Work also commenced on the revision of the existing monthly retail trade estimates, calculated on a new (1966) Census base, and a report on the first phase, covering 1961 to 1966, was published in the September 1969 issue of the *Canadian Statistical Review*. Revisions for the 1966-1969 period are being completed and the entire series, from 1961-1969, will be published shortly (Cat. No. 63-517). Results of the 1968 survey of retail sales by commodity classes should be published in early summer 1970.

Other reports released during the year (excluding monthly publications) were *Voluntary Group Stores, 1967* (Cat. No. 63-215); *Shopping Centres in Canada, 1966-67* (Cat. No. 63-214) including, for the first time, a section on service trades operating in shopping centres; *Vending Machine Operators, 1967* (Cat. No. 63-213); and *New Motor Vehicle Sales, 1968* (Cat. No. 63-208). The monthly survey,

Chain Store Sales and Stocks (Cat. No. 63-001) was expanded to cover all known chain organizations commencing with January 1970 results. The only weekly survey carried on by the Division, *Department Store Sales by Regions*, was discontinued at the end of 1969 due to a serious deterioration in the quality of the data reported by respondents.

As mentioned earlier, a review of all retail trade surveys was carried out in the latter part of 1969. As a result of this review, decisions were made to alter the methodology and content of various annual surveys, commencing with the 1969 survey year. These changes as far as retail trade is concerned, can be summarized as follows:

(1) The shopping centre survey will be undertaken on a full-coverage basis only every second or third year (but always coinciding, every fifth year, with a census); in the intervening years, the first being 1969, the survey will be carried out on a simplified basis.

(2) The vending machine operators' survey will be undertaken on a full-coverage basis only every second year; in the intervening years, starting with 1969, the survey will be carried out using a preselected panel of large firms and a sample of new firms to ascertain 'births'.

(3) The voluntary group survey will be expanded to include franchised service trade establishments and, although remaining on a full-coverage basis, will be spread out over a three-year period rather than the present one year. Each one of three sectors: retail stores affiliated with food wholesalers, retail stores affiliated with other than food wholesalers, and service trades, will be covered in successive years. However, the survey will be suspended during a census year.

It is hoped that, with this change in methodology, early estimates of annual results can be made available approximately 5-6 months after the survey year, instead of the 12-14 months necessary for full-coverage surveys. If this proves to be successful, the sample approach will be carried through every year, including full-coverage years, in order to yield early estimates.

For most of the 1969-70 fiscal year, the major efforts in the service trade area were concentrated at bringing the publications programme up to date. Manuscripts for two publications covering the advertising field, *Advertising Agencies, 1968* (Cat. No. 63-201), and *Advertising Expenditures in Canada, 1967* (Cat. No. 63-216), were completed and are being printed. In the area of motion pictures, two surveys were conducted covering the year

1968: *Motion Picture Production* (Cat. No. 63-206), was released this year; *Motion Picture Theatres and Film Distributors* (Cat. No. 63-207), is in the manuscript stage. The *Power Laundry and Dry Cleaning Plants* surveys (Cat. No. 63-205) for 1967 and 1968 are also in the final manuscript stage and will be released in the coming fiscal year, as will the 1968 survey of *Funeral Directors* (Cat. No. 63-511). The monthly survey of *Restaurants* (Cat. No. 63-011), and the semi-annual survey of a sample of larger hotels, reported in the *DBS Daily Bulletin*, have been kept on schedule. The 1969 survey of laundries and dry cleaning plants will be a sample survey only; a full-scale survey, it was felt, should only be conducted every other year.

The annual *Hotels* survey (Cat. No. 63-204), and its publications programme has encountered numerous problems during the past few years which are being overcome and, as a result, the coming fiscal year will see the publication of the 1966, 1967 and 1968 surveys. For 1969 the programme has been expanded to include motels, tourist courts, tourist homes and tourist camps, and the publication will change its name to *Accommodations Survey*; co-operation to assemble a comprehensive mailing list is being obtained from provincial sources.

A new sample of restaurants which will be more representative of the various kinds of restaurants than the old sample, was selected for the monthly survey, *Restaurant Statistics* (Cat. No. 63-011). Tests and evaluation will be carried out over a period of months before the revised series is published.

The *Destination of Shipments Survey, 1967* is being tabulated and it is hoped that tables showing total value of shipments originating in each province and broken down by province of first destination will be ready in time for the Federal-Provincial Conference at the end of May 1970.

Plans to replace the collection of retail store credit data (published in the monthly bulletin *Credit Statistics* - Cat. No. 61-004) by a newly designed, updated sample associated with the new retail trade sample from the present census-data-linked sample, were delayed awaiting the design and tests of the new retail trade sample. Although current estimates of retail store credit are based on modified 1951 Census data, quality control checks with subsequent census results show only a moderate divergence in aggregate. However, the shift to the new sample is expected to improve the quality of these statistics within the various kinds of business groupings. Particular attention is being given to the whole field of service credit and credit card issuance and usage.

In the area designated 'special projects' is the programme to provide essential statistics for the whole field of 'non-store' retailing in Canada. These data are required to supplement the role of retail trade statistics in the bureau-wide scheme of a fully integrated statistics framework of the national economy. The results of the first annual survey of Direct Selling in Canada (Cat. No. 63-218) were published in July 1969, but plans to expand coverage in the next survey to include the 'direct sales' of wholesale and service establishments were postponed pending the availability of computer print-outs of the 1966 Census of Merchandising and additional staff resources to handle an expanded programme. Coverage was extended to another segment of 'non-store' retailing with the first survey of Campus Book Stores (Cat. No. 63-219), the results of which were published in July 1969.

Developments in statistics on merchandising stocks and inventories have been retarded by delays in the full implementation of the new retail trade sample. As with retail credit statistics, a special new independent updated sample for inventories is contingent on the successful launching of the new fully computerized retail trade sample survey.

During the 1969-70 fiscal year, the Research and Development Section of the Division began a study of the influence of suburban shopping centres on the central business districts of large urban areas. This subject has generated considerable interest among town-planners, municipal governments, real estate developers, and retailers. A pilot study is being carried out in Toronto and Ottawa and a preliminary report will be submitted in the next fiscal year. After that, it is expected that the study will be expanded to other Canadian cities.

Prices Division

The function of the Division is to collect, compile and publish data on prices and consumer expenditure. The Division is divided into three subject areas - Retail Prices and Living Costs, Industrial Prices, and Central Research. The measurements of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries are included in the first group. Also included are family budget surveys and studies providing statistics on family expenditure for various types of families. Industrial Prices, on the other hand, cover measurements of price movements in the production and distribution of commodities and services in which the primary focus is on

the prices of the outputs and inputs of individual industries within the standard industrial classification. The Central Research group co-ordinates research and analysis in prices in areas common to the other subject areas, including the treatment of quality change, analytical techniques and price index methodology.

The regular monthly issues of *Prices and Price Indexes*, which includes all price statistics published by the Division, and the earlier released monthly issues of *Price Movements* in which sensitive indexes are selected for early release, continued to be published during the year.

In the field of retail prices and living costs, price surveys were considerably expanded to provide full coverage of consumer baskets in cities for which consumer price indexes are being developed, and to amplify coverage of important components of budgets in other urban locations. For example, production of monthly consumer price indexes for Quebec City and Thunder Bay, on a 1969 time base, will be completed by the Retail Prices Section during 1970. The increased coverage of other urban centres will be reflected in the Consumer Price Index for Canada. A thorough review and documentation of the processing operations involved in the production of the monthly Consumer Price Index is well underway, primarily to facilitate the forthcoming automation of this series. As well, rescheduling of price collection in the field is also in progress. Updating of the Consumer Price Index basket of goods and services has been delayed due to the unavailability of required family expenditure tabulations. Thus, revision is now expected to be completed in 1971. The portion of medical care available through government supported medicare plans was deleted from the baskets relating to the Canada and the relevant regional city consumer price indexes because changes in premiums by consumers do not necessarily reflect changes in the price of the medical services provided.

The "Canadian Inter-City Retail Price Comparisons" relating to May 1968 were updated to May 1969 and expanded by the Comparative Living Costs Section to include eleven urban centres in total. The study provides measurements for about three quarters of the consumer budget in nine cities, forty-five per cent in one, and food items only in the remaining city. These indexes were published in the November 1969 issue of *Prices and Price Indexes*. Work on the development of comparative price differentials for shelter items was continued throughout the period. For example, inter-city price indexes of domestic fuel and utilities relating to eight major urban centres across Canada were completed and will be released in 1970. The

section continued developmental work aimed at measuring differentials in living cost conditions in relatively isolated northern Canadian communities. In this connection, staff members visited settlements in Northern British Columbia and the Yukon, Northern Ontario and Quebec, and Labrador to collect relevant living cost and price data. Comparative Living Cost Indexes were produced for thirty-one locations in four regions in 1969-70. The section also made plans to expand the coverage of locations through the use of mail surveys of living costs and prices. Though the primary purpose of these measurements of comparative retail price and living costs in remote areas in Canada is to establish appropriate allowance levels for federal government personnel serving in such areas, other prospective users have been advised of their availability since it was felt that the survey results might be of use in a wider context.

The detailed National Food Expenditure Survey carried out in 1969 by the Family Expenditure Section involved approximately 1,000 urban and rural households in each month. In addition to providing information on food purchasing patterns, the survey will yield expenditure data on a range of non-food items normally purchased in supermarkets. The field collection of monthly two-week dairies was carried out in 1969-70 and the coding of items and editing of returns are nearing completion. Some computer tabulations of results are expected in 1970. The planning, preparation of documents and enumerator training respecting the 1969 full-budget family expenditure survey was also carried out in the period. It is expected that this survey will yield 15,000 usable schedules. The field interviews relating to both urban and rural families and covering the year 1969 on a recall basis, started in January and continued through March 1970. Manual editing of returns, coding of items and keypunching of data will be completed by September 1970. It is anticipated that the detailed tabulations will allow for classification of spending patterns by a large number of family characteristics and will be available in 1971. Computer tabulations relating to the 1967 full-budget annual recall survey involving 2,000 family and individual records in eleven cities have been delayed but will be available in 1970.

The International Prices Section continued to provide the statistical support required to regulate the allowances of Canadian Government civilian and military personnel serving outside Canada. During the period, full-budget surveys of comparative retail prices and living costs for forty-five foreign cities were analysed, while abbreviated surveys were analysed for seventeen additional locations. Throughout the year, a continuous review and updating of the validity

of existing indexes was maintained by reference to foreign and domestic price movements, exchange rate changes, and a broad range of world-wide economic and statistical indicators. A full survey of shelter costs for military personnel serving in Europe was completed. A world-wide family expenditure survey amongst Canadian government personnel abroad, contemplating returns from some twenty-five hundred respondents, was launched with the analysis planned for 1970-71. During the year under review, section officers visited twelve locations in Western Europe where civilian and armed forces personnel are serving.

In the industrial prices field, revised Industry Selling Price Indexes relating to manufacturing industries in Canada were introduced in January 1970 in a reference publication entitled *Industry Selling Price Indexes, 1956-1968* (Cat. No. 62-528). The primary features of the revised price indexes include the introduction of a 1961 time base, revised commodity content and weights based on 1961 industry shipments, and classification of industries according to the 1960 Standard Industrial Classification. Revised price indexes for subsequent time periods are available in the monthly publication, *Prices and Price Indexes* (Cat. No. 62-002). Developmental work continued throughout 1969-70 to expand the number of manufacturing industries for which price measurements are available.

The development of capital goods price indexes continued throughout the period. With respect to residential construction, the field work was begun to collect prices for single family dwellings from a sample of large builders in five urban centres across Canada. In addition, planning of a pilot project was undertaken for production of experimental price indexes for single family dwellings using regression methods. In the area of non-residential construction, plans were completed for model pricing of a commercial office building and a composite high school. Plans and specifications of the buildings selected were translated into quantities of in-place components. The quantities for the office building will be priced for the first time in April 1970 in four cities. A pilot survey was begun relating particularly to the construction of electrical distribution systems and transmission lines, to determine the feasibility of calculating unit installation costs for a number of finely specified construction projects. Developmental work continued respecting pricing of commodities for which there is no regular production of identical items from period to period, i.e. unique goods. This work is concentrated presently in the fields of electrical utility equipment, railway rolling stock, precast concrete, fabricated steel, laminated timber and prefabricated housing. The review of

price indexes of machinery and equipment purchased by industry, including selection of appropriate specifications and collection of prices, continued throughout the period. Machinery and equipment price indexes relating to the foods and beverages industries and to construction are close to completion.

In the service industries area, planning and initial negotiations respecting the development of indexes measuring the movement of prices of rail transportation were undertaken in 1969-70. With respect to the distributive trades, a study was begun to determine the conceptual basis for pricing distributive margins and to identify the statistical problems likely to be encountered in the development of price indexes of distribution.

A project to automate the production operations for industrial price indexes was initiated in 1970 and is being carried out by a special team of subject-matter, survey research and computer specialists. A preliminary design of the system was completed in 1969-70 and the detailed systems analysis was begun in February 1970.

Transportation and Public Utilities Division

During the year, a reorganization of the Division was initiated. With the appointment of an Assistant Director, an Operations Section was established with responsibility for all aspects of collection, compilation and production of all publications, special tabulations, etc. in the area of Transportation and Public Utilities.

The Director chaired the first session of the Sub-Committee on Transportation and Communications Statistics of the Inter-American Statistical Institute in Washington, D.C.

After extensive study and negotiations, the Dominion Bureau of Statistics, effective January 1970, implemented a completely revised programme of railway freight commodity statistics in the Transportation Section. This programme is divided into two main areas, namely:

(a) A commodity conversion project - In an effort to make railway commodity statistics compatible with those for other modes of transport as well as with other commodity series published by the Bureau, the *Railway Freight Traffic* publication has been converted from the old 267 commodity series to a new series of 320 commodities, based on the Standard Commodity Classification or SCC. Involved was the development of a commodity conversion system to convert each of the railways' 13,000 commodities, based on a different commodity structure, to the new 320 SCC-based codes.

(b) Railway carloadings statistics - Beginning in 1970 the *Railway Carloadings* series was expanded to show a 70-commodity breakdown in place of the previous 48-commodity split. This expansion also permits the segregation of commodities which have been gaining in economic significance such as potash, sulphur, lead and zinc ores, and plywood among others.

In addition, the new series will show tons loaded. This should provide a more effective as well as stable measure of traffic volume overcoming the problem resulting from the introduction of larger equipment. The frequency of this publication has been changed to monthly from four times monthly. However, total carloads and tons along with piggyback carloads and tons for Eastern and Western Canada will continue to be published on a four-times-monthly basis in the *DBS Daily*.

After some study the Prices Division and the Transportation Section have arrived at preliminary proposals for the development of a railway freight rates index. Negotiations are currently proceeding with the Canadian Pacific Railway to gain access to computer print-outs to obtain the required information.

The shipping series, which covers over one hundred and fifty thousand commercial vessel arrivals and departures, has been fully computerized for the production of monthly and annual data. Annual output has been expanded considerably to generate full origin and destination data for all Canadian ports and commodity categories, to satisfy the demand for this information both in industry and government.

The monthly canal series has realized a significant improvement in timeliness due to the adoption of new tabulation and publication printing procedures, while the annual report *Water Transportation* has been broadened to include private carriers, that is those which essentially comprise a branch of a firm established to transport the goods of the parent company. A special paper entitled *Trucking in Canada 1957-1967* was prepared and presented to the Annual Meeting of the Canadian Trucking Associations.

This paper effectively closed out the Motor Transport Traffic Survey as estimates were made to cover those years during which

the survey was conducted but no information published.

Considerable progress was made in planning a new survey to replace the Motor Transport Traffic Survey. Originally a two-part survey was proposed: (1) a Truck Inventory and Use Survey, and (2) a Commodity Origin and Destination Survey.

Planning for the former was completed in mid-year and a series of meetings arranged with officials of the Department of Transport, Canadian Transport Commission, Trucking Associations and various interested groups and individuals to determine the usefulness of this type of survey. There was general consensus that the information from the proposed survey would only have limited value and further planning was abandoned. In its place a complete revision of existing motor carrier series was initiated. This review is almost complete and is expected to lead to a substantial improvement in the coverage of both financial and operating statistics of the for-hire motor carrier industry in Canada.

Plans have continued with respect to the development of the Commodity Origin and Destination Survey. Field work has been completed and the feasibility of the proposed methodology established. The essential feature of the proposed survey involves the use of individual company waybills or probills in an attempt to obtain detailed estimates of the origin and destination of commodity movements by truck. A pilot study is shortly to be undertaken of a selected number of for-hire motor carriers through the Regional Offices.

During the year a *Transportation Service Bulletin* was introduced, designed both for the quick release of routine transportation statistics and also for the release of special material not normally published.

The Division continued to provide a large measure of assistance to the Canadian Transport Commission in the initiation and resolution of a number of important studies and projects. Notable in this regard was the advice and assistance given to the Research Division of the Canadian Transport Commission with respect to a major study of containerization in Canada through the development of an entirely new approach to the estimation of commodity flows to, from and within Canada.

SOCIO-ECONOMIC STATISTICS BRANCH

The Socio-Economic Statistics Branch is responsible for a wide range of demographic, sociological and economic statistics which deal predominantly with information about persons and families derived from household and institutional sources. They include the following: censuses of population, housing and agriculture; statistics on elementary, secondary, higher and adult education, vocational training and school finance; agricultural statistics; health, vital and judicial statistics; family income, assets and liability statistics. The Branch is also responsible for the field operations of DBS including the labour force survey, and eight Regional Offices, as well as for provincial liaison and consultative services.

The organization of the Branch comprises the following units: a small Branch headquarters staff; Agriculture Division; Census Division; Consumer Finance Research; Education Division; Health and Welfare Division; Judicial Division; Provincial Liaison and Consultative Services; and the Special Surveys Division.

Agriculture Division

The Agriculture Division is responsible for development, operation and co-ordination of statistical systems which provide intercensal estimates of producing units -- acreages and livestock numbers, production, utilization, value and prices of farm commodities, farm wage rates, farm expenditures and receipts, farm capital and debt, physical volume of output, domestic consumption of food, farm inputs and physical productivity factors, farm practices and indexes of farm prices. Data are collected directly from farmers and agricultural industries, chiefly by means of mail questionnaire surveys on a sampling or partial coverage basis. Arrangements are also made to secure data from administrative sources.

The agricultural statistical system is conducted in close co-operation with provincial government departments with which the Division has joint surveys and other work-sharing arrangements. There is also close collaboration with agencies such as the Canada Department of Agriculture from which administrative statistical data are procured.

Besides maintaining a flow of data related to agriculture, the Division is active in devising improved data collection procedures to meet the rapid changes in the structure of agriculture and allied industries and to fulfil demands for new, more timely and better

quality data. Major stress is also being placed on efficiency of data handling and storage. To achieve these improvements, the Division is undergoing a reorganization in which more emphasis will be given to electronic data processing and improved methodology in collection of data.

The Division is presently organized into the following sections: Crops, Livestock and Animal Products, Farm Finance, and Special Projects and Research.

The Crops Section conducts regular and special purpose surveys and publishes timely statistics and market information on field and horticultural crops for Canada, and by provinces.

In the Crop Reporting Unit much of the data on the principal grain and oilseed crops are collected largely by means of mailed questionnaires from a special corps of volunteer farm correspondents. Information is published on growing conditions, acreages to be planted, fertilizer use, probable yields, farm-held stocks of grain, prices received by farmers and crop production. These statistical systems are designed to meet the information requirements of farmers, marketing agencies and allied industries; in addition, the annual field crops programme provides a vital year-to-year link with the decennial and quinquennial Census of Agriculture benchmark statistics. Most of published data refer to provincial totals only. However, data for many items are tabulated by smaller geographic areas and made available to provincial authorities.

Data obtained from these farm surveys are integrated with a vast array of statistics emanating as by-products of the operations of the Canadian Wheat Board, Board of Grain Commissioners, trade groups such as the National Millers' Association and several government departments to provide continuous studies of the supply movements and trade of Canadian cereals, feed grains and oilseeds. An agriculture reporting programme relative to world trade in grain and oilseed crops is maintained through the co-operation of the Canadian Trade Commissioner Service in order to provide a better assessment of Canada's position in the international trade of these commodities as well as of new and changing policies affecting this trade. Recent steps have been taken to improve and expand this programme of foreign crop reporting. The review based on the analysis of domestic and foreign markets for grains and oilseeds are set forth in two comprehensive publications, *The Wheat Review* and the *Coarse Grains Quarterly*. Monthly surveys

of the grain milling and oilseed crushing industries are carried out as part of the overall domestic situation for grains and oilseeds. Expansion of data in the area of oilseeds and fats and oils has continued. A complete review of all aspects of Canada's grain trade is set forth in the annual publication, *Grain Trade of Canada*.

In addition to an extensive publication programme, numerous research studies were carried out to meet the economic and statistical requirements of both the government and private sector.

The monthly survey of seed processors established in 1967 was contrived to collect data in regard to seed purchases, inventories on hand, and so on. This series provides an indispensable check on production of these crops as well as a picture of marketing patterns. In an effort to obtain more information at the farm level, an enumerative sample survey was carried out by direct contact and by a random point system in the Peace River area to establish acreage of the different crops grown. This was supplemented by a special post-harvest mail survey in 1969. The Seed Unit also conducts a special survey of mustard seed growers along with the regular survey of seed corn sales.

The Special Crops Unit is responsible for statistical and subject-matter output systems relating to horticulture crops, honey and maple products on a national and provincial basis. The area covered ranges from the most extensive form of agriculture, i.e. bee-keeping, to the most intensive form, i.e., the greenhouse industry. In the Unit, large volume mail questionnaire surveys form an essential part of the data collecting systems. However, mail questionnaire surveys do not provide unbiased data that can be used for testing the objectivity of the response on the part of the respondents. Accordingly, systems to test quality are necessary and are being designed. In recent years objective random sample surveys involving statistical and biological variables have been used in forecasting the peach, grape and sour cherry crop in Ontario. Results obtained from these objective estimating surveys show that, for the most part, the techniques are quite satisfactory for these crops.

The Survey Research Unit is associated with most of the development work undertaken in the Crops Section involving the application of probability sampling methods, which are now part of the operating tools of the Division, an example of this is the special March 31, 1970 survey of farm held stocks of rapeseed in the Prairie Provinces. The Survey Research Unit has been active also in fostering the interchange of statistical information with provincial agriculture statis-

tical offices and has co-operated with the Canada Department of Agriculture in the Canadian Plant Disease Survey.

The regular operating programme of the Livestock and Animal Products Section includes the publication of a series of monthly, quarterly, semi-annual and annual reports related to the Canadian livestock industry. Monthly reports provide data on stocks of principal food commodities in storage in Canada, the output of dairy plants and estimates of farm value and production of milk and eggs. Quarterly reports are limited to the swine industry showing quarterly estimates of farm inventories, farrowings, and expected farrowings. The semi-annual reports cover farm inventories for all livestock except fur-bearing animals as of June 1 and December 1. Production, disposition, trade and other related data for all livestock and animal products are covered in the annual reports of the Section.

During the past year, work in the area of probability sampling has been carried a stage further by the introduction of non-response surveys. These were carried out in Alberta (cattle-on-feed) and in Ontario (hogs) to test the hypothesis that those producers who do not respond are not different, as producers, from those that do respond. These surveys were introduced in the summer using a subsample of areas. Probability of selection of areas was in proportion to the number of hogs or cattle on feed in that area. Farmers selected were visited and enumerated. Results indicated that in general the hypothesis held, although the sample was too small to be able to make definitive statements of this nature for all subareas. Lack of funds prevented larger samples at this stage.

In the previous annual report a more detailed summary of the probability sampling method used was presented. The method is entitled Replicated Sampling and is employed to derive laying hen and egg estimates for Nova Scotia, hog inventory and farrowing estimates for Ontario, and cattle-on-feed inventory estimates for Alberta. The method is proving successful, but maintenance of a current mailing list is proving to be the most formidable part of the process.

Electronic data processing has been introduced to some of the Section's surveys, but unfortunately shortage of programmers, reorganization of the Computer Branch, introduction of new computers, have all helped to slow down the process. Considerable exploratory work has been done, however, with the Computer Systems Development Division.

Further evaluations of output were made during the year in consultation with users and suppliers of statistics. As a result, several changes to content matter were made.

Collection of fresh, cured and uncured meat inventories was discontinued from January 1, 1970, and also for lard, tallow, and margarine except that in the case of the latter cessation commenced March 1, 1970. Poultry inventories are presently being evaluated relative to eliminating fresh stocks and collecting the frozen product only. Savings to date, however, have allowed taking on publication of intentions regarding stocks of turkey meat in cold storage.

Starting with April 1, 1969, the Poultry Division of the Canada Department of Agriculture became completely involved in the collection of stocks of poultry products in the four Western provinces, and similarly for the Eastern provinces commencing April 1, 1970.

Preparation of a Dairy Industry Handbook is reaching its final stages to be released some time early in 1970.

The feasibility of collecting dairy and cold storage statistics for Newfoundland was explored and a decision was reached not to do so.

Hatchery placements and other associated data have reached such a stage that only an end-of-year Turkey Survey is now required. Previously this Survey was conducted also on June 1, and August 1, as well as on December 31, but these two earlier surveys have now been dropped.

During the fiscal year 1969-70 the Farm Finance Section continued its regular programme of activities dealing with the development and operation of a statistical system for the collection, compilation, analysis, evaluation and publication of provincial statistics on farm income, expenditures, prices, capital investment, productivity, land values and wage rates. This system was developed to provide regular detailed estimates of financial and economic developments within the agricultural sector of the economy for use in measures of the total economic activity of the nation for governmental and industrial planning, policy decisions and economic research.

During the past year, the Farm Finance Section was involved in the general improvement in timeliness of the preparation of statistical series for inclusion in the National Accounts. This involved the preparation of quarterly estimates of farm cash receipts and value of changes in farm inventories of crops and livestock 35 days after the close of the accounting period instead of the former 60 days. Most of the statistical series prepared by the Farm Finance Section were stored in the Bureau's data bank (CANSIM) and considerable effort was devoted to the development and testing of retrieval methods. The revision

of the index of farm prices of agricultural products was completed and the results published. These revisions included a conversion from a weight and time base of 1935-39 = 100 to a weight base of 1960-62 = 100 and a time base of 1961 = 100, and, since 1957, an increase in the number of commodities included.

The Special Projects and Research Section was assigned a major responsibility in the planning and development of computer systems for the processing, storage and retrieval of data collected in surveys conducted by the Agriculture Division. These activities involve co-ordination of the work by commodity statisticians in the Agriculture Division and technical specialists in the Operations and Systems Development Branch. The Section also participates directly in defining the requirements for data processing and in specifying the contents and format of data input and output. During 1969-70, attention was centred on the initial planning associated with computer processing systems for (1) the Central Register of Farms and (2) the June and December Surveys of Crops and Livestock.

The general requirements have been determined for some major changes in the computer processing system which was developed for the 1966 Farm Mailing List. The new system, designated as the Central Register of Farms, is intended to extend and add to the capabilities of the current system. Increased flexibility and efficiency in the system are expected from extending the use of generalized programmes for data retrieval which would provide several options for the contents and format of address labels and lists of farms for survey operations.

Plans for additional capabilities provide for the selection of samples for commodity surveys from the master tape file, and the creation of secondary tape files containing the mailing lists and other relevant information for commodity surveys. Consideration will also be given to the development of an integrated operation for the correction of data records on the secondary files for commodity surveys and the master file for the Central Register of Farms.

The June and December Surveys of Crops and Livestock provide for the collection and processing of primary data on the operation of farms in a semi-annual mail survey with reference dates of June 1 and December 1. These surveys consolidate the collection of data for several agricultural commodities on one questionnaire. The data are used in calculating statistical indicators required to derive the official estimates for several basic series in the present integrated system of agricultural statistics. In terms of the volume of questionnaires and the input of

personnel resources required by the manual system of data processing, the June and December Surveys qualify as the largest project in the programme of the Agriculture Division.

The development and application of an electronic data processing system for the June and December Surveys of Crops and Livestock is directed toward achieving four objectives:

(1) An improvement in the quality of survey data output and the statistical estimates is expected from the completely consistent application of editing and other processing procedures.

(2) A gain in timeliness for release of the statistical estimates derived from the survey data can be obtained through an anticipated reduction in elapsed time for the data processing operations.

(3) Satisfying the demands from the agricultural sector of the economy for new series of statistics and for greater detail in existing series of statistics becomes more feasible with the increased capability provided by an electronic data processing system.

(4) Research projects which require extensive data manipulation to examine data characteristics, reporting errors, memory bias and response habits will be facilitated by storage of the survey data in a form that is appropriate for the application of computer processing methods.

Census Division

Activities in the Census Division during the past year have been directed toward the finalization of plans in preparation for the 1971 Censuses of Population, Housing and Agriculture. The September 1969 Trial Census was the last in a series of tests which began in 1967 during which the merits of self-enumeration and mailing techniques for the distribution and return of the questionnaires were investigated. The localities selected for this final test were the cities of St. Catharines and Sherbrooke together with their surrounding areas, and the rural area encompassing Souris, Manitoba. As a result of this extensive testing programme, almost all aspects of the full-scale 1971 operation are now in their final stages.

The response rates from these tests have indicated the feasibility of the proposed techniques. In 1971, therefore, a system of enumerator "drop-off" self-enumeration questionnaires will be employed for the majority of the population. In the larger urban centres, the questionnaires will be completed

by the householder and returned by mail. In the smaller centres and rural areas, the questionnaires, including the Agriculture Questionnaire where applicable, will be retained for "pick-up" by the enumerator. The traditional canvasser enumeration will be employed for only a small percentage of the population residing in certain remote areas such as outports in Newfoundland and the Northwest Territories.

The lists of questions to be included in the Censuses of Population, Housing and Agriculture which have been under study for the past three years, were given final approval by the Governor in Council in January 1970. Development of the computer edit specifications and the tabulation programmes are approaching completion. Both the content and the tabulations have been discussed with federal and provincial agencies and consideration has been given to briefs submitted by non-governmental statistical users such as universities and urban-planning concerns.

While self-enumeration techniques are expected to improve the quality of the census product, the use of sampling in the 1971 Census is expected to reduce costs and provide more timely data. The tests and studies that have been undertaken since early 1967 indicate that a 33 1/3 per cent self-enumeration sample for all but a few basic Population and Housing questions, will not adversely affect the quantity of small-area data that can be provided, as compared with earlier censuses. It is planned, therefore, that two of every three households will complete a questionnaire containing only basic questions about age, sex, marital status, mother tongue, and a few housing items such as tenure, type of dwelling, number of rooms, and sanitary facilities, while every third household will complete a questionnaire containing the full range of approved socio-economic interests.

Meetings were held with principal statistics users in an effort to inform them of the proposed tabulation and publication programmes which have assisted in the plans for the dissemination of the 1971 Census results. The methods and procedures that will be required to handle the expected heavy increase in requests for both standard and special census tabulations have been studied. A lexicon of census terms and definitions has been initiated for the benefit of the users.

In anticipation of an ever-increasing demand for small-area data, a series of maps for such users is under development. Research has been conducted into the definition and criteria for the delineation of urbanized areas and the coding of the question on place of work is being studied with particular attention being given to the level of the coding.

Experiments have been carried out to examine methods to extend the range of tabulations, and in particular, the speed with which both publications and access to tabulations will become available to the user. As a part of this programme, there has been continued participation in the development of a "geocoding system" which will provide rapid and economical access for special tabulations of non-standard areas. Twelve urban centres have been designated for "geocoding" and at present, area master files are essentially completed for five of these centres. Plans are well under way to link the Population and Agriculture Questionnaires thus providing considerably more useful population data for farming interests than has been available in the past.

The Division has continued to release the regular series of reports on estimates of population and families. Current statistics on citizenship, immigration, and migration were updated and processed, and mid-month estimates for vital statistics rates were initiated. A new series of population projections by age and sex up to 1984, based on 1969 post-censal estimates was prepared for all of Canada. The two volumes of the 1961 Monograph, *Internal Migration in Canada*, were published.

Members of the staff represented the Division and the Bureau at national and international meetings which included the Population Association of America, Ontario Institute for Studies in Education, and the Association of Canadian Map Libraries.

Consumer Finance Research Staff

A special historical report, *Incomes of Non-Farm Families and Individuals in Canada, Selected Years, 1951-65* (Cat. No. 13-529) was released in 1969. In addition to income distribution statistics for family and individual characteristics such as age, and family size on a current dollar basis, the report contained statistics on constant dollar income series expressed in 1961 dollars as well as statistics on the quintile composition.

The 1970 Survey of Consumer Finances was pretested in May 1969 by two methods of enumeration - self-enumeration and enumeration by interviewers. After analysis of the results, the decision was taken to use interviewers to collect the data. A special report has been completed on the test *Consumer Finance Research Pilot Survey 1969: An Evaluation of Enumeration Methods*.

The planning of the 1970 Survey of Consumer Finances was completed and the field work for the survey will take place in May 1970. Approximately 12,000 households will be interviewed in this survey which will collect

data on balance sheets as well as income. Similar surveys were carried out for the years 1955, 1958 and 1963 but this is the first such survey to include farm households. Further, the questionnaire has been expanded to obtain much more comprehensive coverage of assets and debts. For example, data will be collected on equities in businesses. The major assets excluded from the survey are equities in insurance and pension plans but data will be collected on premiums and contributions.

The staff collaborated with the Prices Division on the planning of the national Family Expenditures Survey which took place in February - March 1970. Both surveys have a common core of questions and concepts so that when data become available from both surveys they can be integrated to maximize the usefulness of statistics collected.

Programming delays have held up completion of the 1968 Survey of Consumer Finances. However, preliminary results were released in the fall of 1969 along with some updated estimates of the population in poverty and their characteristics. Programming was almost completed at year-end so that tabulations should be available early in 1970-71 with the final report released in the summer or fall of 1970.

The 1968 Survey of Consumer Finances and the 1968 Household Facilities Survey interviewed almost the same set of households. A linkage of these surveys has been planned and an analysis developed of the data. Programming of the tabulations has been contracted out and should be completed by mid-1970. A special report will be issued later in 1970. It is hoped that such linkage will be a regular feature of future surveys.

The methodological problems of developing small-area income estimates are nearing solution and estimates should be ready in 1970-71. A preliminary release will be made in the DBS *Daily Bulletin* with publication following later. As part of the development of estimation procedures, special analyses were made of the coverage of income tax statistics which will be used as projectors in the series. Reports are being prepared on the taxation statistics studies and will be made available to users on request.

A paper was prepared on *Some Comparisons of the Canadian - U.S. Income Distributions* for the International Conference on Income and Wealth held in Israel, September 1969. This paper will be published in the Journal of the Association. A study was completed on the problems of measuring the self-employed labour force on labour force surveys. A report was prepared on the study and this will be a background paper for evaluating the present concepts. The planning of a number of new research studies has been started.

The Co-ordinator represented Canada in Geneva at the Conference of European Statisticians Working Group on a System of Demographic and Social Statistics while another staff member participated in the Working Group on Income and Expenditures Statistics. The staff provided special assistance on a number of government white papers such as that on social security. The staff participated actively in all subject-matter aspects of the planning of the 1971 Census of Canada. The staff provided consultative services to other government departments as well as to outside users.

Education Division

The Education Division reports on all aspects of education in Canada. Data are collected on kindergartens, elementary, secondary schools, colleges, universities, adult education, and on trade and technical education. Reports are published on enrolments, staffs, and finance at all levels of education.

The vast majority of education is carried out under the authority of provincial governments and thus the bulk of the data required to create a portrait of the national educational effort is solicited from provincial departments of education. In general, information on private schools and post-secondary institutions is obtained directly from the institutions concerned.

The magnitude of the education system, and the rapidity with which changes are being introduced, has created a need for serious reassessment of existing statistical programmes and the initiation of new programmes to meet new demands for a wide range of information. Education has become the country's leading industry in terms of the percentage of the population involved, and in terms of its demands on available revenues. Some thirty per cent of the entire population of Canada is directly involved in education either as students or as staff members of educational institutes. The total cost of operating this vast enterprise is about seven billion dollars per year. In other words, twenty per cent of all tax revenues derived from all sources by all levels of government is dedicated to education.

The Elementary and Secondary Education Section of the Division provided important information on this largest of all segments of education, during the year under review. The following publications were made available: *Enrolment and Staff in Schools for the Blind and Deaf, 1969-70*, released February 1970; *Statistics of Private Elementary and Secondary Schools, 1968-69*, released November 1969;

Private Kindergarten and Nursery Schools, 1968-69, released July 1969; and *Salaries and Qualifications of Teachers in Public Elementary and Secondary Schools, 1967-68*, released May 1969. The difficulty encountered in securing data from certain provinces has delayed the publication of national enrolment statistics. Initiatives were taken during the past year which should result in an improvement of the timeliness of publications on elementary and secondary enrolments. Included among these initiatives is a projected series of regional publications.

The most important development during the year under review was the initiation, on a pilot project basis, of permanent update records and reports for teachers in the public schools of New Brunswick. The project involves the creation of a basic file on each teacher, and update of the master file.

A co-operative effort was set up with the province of Nova Scotia in processing teacher data: the teachers' documents were edited and coded in the province; DBS did the keypunching and editing; DBS provided the Department of Education with a duplicate tape and some other output in the form of listings and tabulations.

In an attempt to obtain some estimates of teacher characteristics earlier than is now possible through our regular survey, the Section undertook to draw a ten per cent sample of schools and make estimates on the basis of the sample data. At this point in time it is too early to judge the success of the venture. However, preliminary results for two provinces indicate that it is possible to estimate, with an acceptable degree of precision, certain characteristics of the teaching staff.

The Higher Education Section succeeded during the course of the past year in putting all of its publications on a current basis. The co-operation of all the universities and colleges which are included in the surveys deserves mention.

A Higher Education Advisory Committee was established during the past year. This relatively small, though representative group, has provided important advice and assistance in deciding upon priorities and programmes.

The following publications of the section represent only a part of the service which is rendered to the community: *Salaries and Qualifications of Teachers in Universities and Colleges 1968-69*, released September 1969; *Salary Scales for Teachers at Canadian Universities and Colleges 1969-70*, released June 1969; *Survey of Higher Education - Part I: Fall Enrolment in Universities and Colleges*

1968-69, released September 1969; *Survey of Higher Education - Part II: Degrees, Staff and Summary, 1967-68*, released May 1969; *Tuition and Living Accommodation Costs at Canadian Degree-Granting Universities and Colleges, 1969-70*, released August 1969; and *Awards for Graduate Study and Research, 1969*, released August 1969. Close contacts are maintained with the Canadian Association of University Teachers, the Association of Universities and Colleges of Canada, the Canada Council, and other bodies to whom information is supplied.

In the Research Section, most of the 1969-70 fiscal year was taken up with the planning, conducting, and producing of the *Post-Secondary Student Population Survey, 1968-69*. This was done on behalf of the Federal Department of Finance, Department of Secretary of State, and all the provincial government departments involved in Student Aid. Delivery of 1,557 pages of tables to the agencies involved was made in September 1969 and a general publication was produced for public release in April 1970. Other activities included the preparation of a Reference Paper on Canadian Education for the Department of External Affairs and a chapter on Education for the Canada Handbook.

The year under review saw the publication of the following library surveys in the Adult Education Section: *Survey of Libraries, Part II: Academic Libraries, 1966-67*, July 1969; *Survey of Libraries, Part I: Public Libraries, 1967*, August 1969; and *Preliminary Release, University and College Libraries, Academic Year, 1968-69*, January 1970. In order to meet the changing needs of the library community, work was started on the revision of all questionnaires and the creation of new collection documents for both provincial and regional libraries. These activities are being carried out in close collaboration with the Statistics Research Committee of the Canadian Library Association. The design of two new surveys in the field of adult education was undertaken during the year. One covers the field of adult education at the elementary and secondary levels, and the other deals with the extension work carried on by universities. The latter survey has received considerable support and assistance from the Canadian Association of Departments of Extension and Summer Schools. It is expected that two new publications will appear in 1970.

The survey, *Canadian Education Through Correspondence* covering the academic year 1967-68 was completed in 1969 and release is expected before the end of April 1970. For the first time correspondence courses either offered or sponsored by business and industry were included, and the area proved to be of considerable size. A preliminary release was prepared in April 1969 and 250 copies taken

to the Eighth International Conference on Correspondence Education, held in Paris, May 19-23, 1969. Over 200 delegates attended, with representatives from every continent. That the Canadian government sent an official representative, Mrs. Cameron, Chief of the Adult Education Section, seemed to be much appreciated by the officials in charge. She was asked to chair one plenary session, when the Japanese delegation (over 20 members) made its presentation. (Its spokesman has been in educational television for 20 years.) She was also made a member of the Nominating Committee, composed of representatives from each continent. After the conference, a visit was arranged with Mr. Bellis in London, in charge of adult education statistics for England and Wales, and discussions were held with several other adult education officials.

A grant from the Canada Council made it possible to engage the services of Mr. Walter Herbert as an expert consultant in the field of cultural statistics. Under his guidance and with considerable assistance from practitioners in the field, preparations are being made to survey professional drama and other related activities. A fresh survey was prepared to cover Museums and Art Galleries which have not been reported on since 1964.

Demands on the resources of the Vocational Training Section for the collection and publishing of statistics on education at the post-secondary, non-university level were increased substantially during the year due to the continued expansion of the community college system, a further extension in the number and variety of programmes offered and a consequent growth in enrolment. As a result of the increased importance of these institutions, a project was approved in January 1970 to publish a statistical report on *Canadian Community Colleges and Related Institutions - Full-Time Fall Enrolment and Other Information, Academic Year 1969-70*. One objective of this publication - apart from providing data on a more timely basis - is to report, for the first time, all enrolments at this level including university transfer students. Previous reports on education at this level presented data on enrolments in vocational programme only.

There were incipient developments in the collection of data from post-secondary institutions in Ontario. The Ontario Department, in planning the computerization of records at the CAAT's, has initiated discussions with a view to preventing duplication of effort in the acquisition of data. Their preliminary suggestion is to provide them with the types of data required so our needs can be incorporated into their planning.

With the introduction of semester and trimester system, as well as full-time summer

sessions into post-secondary institutions, the point was reached where consideration must be given to the collection of flow statistics instead of conducting a single survey each fall.

The problem of classifying vocational high school students as such became more acute during the year as more schools experienced difficulty in reporting this type of information. While an attempt was made following the expiry of Programme 1 of the TVT Act to maintain statistical continuity, it had become increasingly more evident that changes in education systems were weakening the distinction between vocational students and those in general programmes. Consequently, data provided by schools were becoming more and more meaningless.

As a way out of this situation, new policy was formulated that, beginning with the 1970-71 school year, enrolments would be classified by grade according to the particular programmes of the various provinces instead of by vocational course by grade. An analysis of enrolments within this context should provide a more useful picture of the numbers who will be entering the labour force, at certain periods, from high schools, and a more meaningful assessment of the degree of preparedness with which they do.

The only significant development in the collection of trade-level data was the making of an informal agreement with the Alberta Department for the provision of computer print-outs in lieu of quarterly, hand-compiled reports.

The Vocational Training Section released the following publications during the 1969-70 fiscal year: *Statistics of Private Trade Schools, 1968*; *Statistics of Private Business Colleges, 1968*; a twenty-page brochure on post-secondary vocational courses in publicly operated institutions in Canada, 1969-70; *Survey of Vocational Education and Training, 1966-67*; and *Survey of Vocational Education and Training, 1967-68*, was completed during the year, and is expected to be released by the end of April, 1970.

A high rate of attrition continued to be suffered by the private business college community throughout the year. The number of schools now involved (circa 85) raises the question of whether a separate survey of these institutions each year is still warranted. It may now be more realistic to include these colleges as a subclassification of private trade schools.

The following surveys were published by the Finance Section: *Survey of Education Finance, 1966*, February 20, 1970; *Canadian Universities, Income & Expenditures, 1966-67*,

January 19, 1970; and *Preliminary Statistics, Chapter V, Education Finance*. Also, the following special reports were released: *UNESCO Report on Education Finance, 1967*, forwarded in July 1969; and *Salaries and Wages in Education, 1967*, forwarded to the Labour Division and the National Accounts Division, in November 1969.

Professional members of the Finance Section attended the annual conference of the Canadian Association of University Business Officers (CAUBO) at the University of Western Ontario in June 1969, and the annual conference of AUCC which was held in Ottawa in November 1969.

During the past year the Projections Section devoted considerable effort to completing a special project for the Economic Council of Canada which presented and analysed enrolments at all levels of education from 1951, and projected them to 1980-81. A report was prepared, in collaboration with H.S. Tjan, on the possibility of constructing an educational model which would serve the needs of the Economic Council and other agencies concerned with educational and manpower planning.

Advance Statistics of Education 1969-70 was published well before the beginning of the academic year; variances between actual enrolments and those forecast were less than one-half of one per cent. Considerable time was devoted to studying the feasibility of making projections of educational expenditures based on the enrolment projections prepared for the Staff Study of the Economic Council.

The implementation of the interprovincial information system on education continued to be a matter of major concern during the year under review. Meetings and discussions were held with each of the provincial departments with the result that substantial advances were made toward the creation of teacher files with three provinces; additional developments are planned.

Discussions on a new structure for the Division were initiated in October, when the Director assumed office. The need for a more flexible organization has become apparent as the dynamics of education make themselves evident in the development of new administrative arrangements, the growth of new institutions, and changes in legislation affecting education. The pattern which is emerging is taking the form of interdependent sections: Students, Staff, Facilities, Finance, and Cultural Activities. It is expected that a higher degree of integrated output will result from this new structure, and that more effective use of resources will be made. The development of a series of surveys on Community Colleges, for which the planning was carried

out during the latter half of the year, will provide a first test of the effectiveness of the new organizational structure.

In addition to the reorganization of existing sections, a new section was created which will concern itself with the problems of the economics of education. Labelled Economics, this new section was not operational during the year under review. It is expected that it will be staffed during the year 1970-71.

The year under review is difficult to assess in view of the fact that the new Director assumed office in October 1969. The tasks of maintaining existing statistical programmes, responding to new demands, and attempting to reorganize the Division, have all combined to present what may appear to be a lack of sense of direction. However, there is emerging a new orientation for the Education Division which will be more in tune with the universe of Canadian education.

Health and Welfare Division

The Division is responsible for the production of statistics on the status of health of the Canadian people, the occurrence of illnesses, and the distribution, cost and availability of health care and treatment. (In the past the Division was also responsible for statistics of law enforcement and the administration of justice but these two functions were transferred during the year to the newly created Judicial Division.) Four sections share the responsibility for producing divisional statistics. The areas of birth, death, marriage and divorce are the concern of the Vital Statistics Section. In addition to carrying out general surveys of these events, the Section conducts special studies such as, for example, of mortality, fertility and life expectancy. The measurement of patient characteristics and patient movement, as these relate to mental disorders and the use of psychiatric facilities, is the responsibility of the Mental Health Section. The Public Health Section has been assigned the investigation of individual conditions and personal characteristics of patients in general and special hospitals and in tuberculosis institutions, the volume of newly discovered cases of malignant neoplasms and the incidence of communicable diseases. The following statistical areas come under the Institutions Section: services, facilities, staff and finances of general and special hospitals and mental and tuberculosis institutions; also the operations of bodies providing related health services or types of related domiciliary care; and, as well, the supply of and the demand for health manpower. These last three named Sections also carry out special studies, as the opportunity and

occasion arise. All four sections integrate their current with their previous output, as much as possible, to facilitate the elucidation of trends, and also seek to make their various series as compatible with one another as the separate circumstances of their origin permit. The Division, on occasion, conducts non-repetitive special investigations. Besides this, the Division also plans continually to extend economically, both in broad and in restricted terms, its coverage of the areas assigned to it. The Division also answers each year a number of special requests, and regularly revises its incoming documents and its outgoing reports, the better to reflect current events - this year, for example, making arrangements to obtain records of therapeutic abortions as these are defined by the Criminal Law Amendment Bill passed in 1969.

The Division met its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports, and by supplying the provinces with basic tabulations of births, stillbirths, marriages and deaths, as required under Dominion-Provincial Agreements. In addition the Division has been preparing alphabetic registers of births, marriages and deaths on behalf of the provinces and the Family Allowances Administration for certification and verification purposes and provided under these agreements.

Throughout the year, demands for information continued at the high level that has been reached for the past few years. These demands have come from public health officials, education authorities, individuals engaged in medical research, manufacturing and distributing firms, market research agencies and other government departments, as well as from the public at large. Many of these demands represent requests for detailed analyses of current and historical records. More frequent this year than ever before have been requests for intensive investigations of the patterns of nuptiality and fertility. These latter requests have been occasioned by the recent drastic changes in the birth and marriage rates in recent years. New developments in hospital and medical care have added to the already considerable flow of demands for information on mortality due to particular causes. Most of these varied special requests required special calculations and compilations, as the information demanded was not available in any published form.

To meet these and a number of other demands at once, as well as at the same time satisfying special interest groups, several analytical studies have already been published, and others planned. These studies relate to cancer, accidents, suicide, heart disease,

foetal and infant mortality, nuptiality, fertility, and life expectancy, and deal with the latest trends in these areas and seek to elucidate factors associated with the direction and magnitude of the trends. A series of annual life tables is being initiated in addition to the official quinquennial life tables around Census years, to serve as a general reference for those interested in survivorship, and for government and other bodies responsible for long-term projections and planning. These reports and studies have been supplemented by a series of technical reports which deal with methodological techniques of life-table construction, statistical measures of trends, and techniques for projections of births, marriages and deaths. In addition, calculations on 15-year projections of births, marriages and deaths were initiated as the base for population projections for demographic and economic planning purposes. The Division also collaborated in methodological studies relating to intercensal estimates of population.

In order to meet the needs of subject-matter specialists and epidemiological researchers, and to accelerate the publication of current data, the release of 3 separate annual reports, one each dealing with births, marriages and deaths, to replace the present combined report, was planned.

Processing of vital records in the Bureau is an expensive and lengthy process. Economies have already been realized by making arrangements with the five largest provinces to share with them the cost of producing basic statistical records, thus necessitating standardization of certain statistical procedures. Further economies, and even more complete co-operation with provincial authorities, are being effected through computerization. To advance publication dates, to provide accelerated service to the provincial governments, and to meet pressing demands for new statistics, the complex and detailed series of annual birth, death, and marriage tabulations are being fully computerized.

Negotiations and discussions with provincial authorities are progressing regarding the adoption of a geographic classification so as to permit grouping of individual local area statistics for population projection, and short- and long- term planning for such other purposes as education, economic, market - and social - research.

Arrangements were made with the Department of Justice for the collection and compilation of statistics on divorce under the new Federal Divorce Act, which came into effect July 2, 1968. In addition to new information on grounds for the divorce action,

the system will provide much more extensive information than it has been possible to compile in the past, including the characteristics of the parties to the divorce, dependents involved, and other statistics.

A new Decennial Revision of the International Classification of Diseases, which is sponsored and published by the World Health Organization, was put into effect in Canada for the classification and publication of the official statistics on causes of death, effective January 1, 1969. The introduction of the new classification necessitated intensive training of provincial medical coding personnel and the resultant modification of mechanical tabulations and other procedures. In addition plans are under way for extending the present series of statistics on causes of death to include all medical diagnoses reported on death certificates. The objective is to provide extensive epidemiological information not previously available, which will give an insight into the etiological processes and interaction of diseases which lead to premature death. At the same time some economies in the production of the present conventional cause-of-death statistics will be realized, as a by-product, through computerization.

Massive punch card record files covering births, marriages and deaths registered since 1925 are progressively being converted to computer tape for convenience of security storage, the preparation of verification listings, if required, for Family Allowances or provincial administrative purposes, for the preparation of special statistical tabulations and for record-linkage purposes.

Each year the Division provides the Vital Statistics Council for Canada with its secretariat service. In addition to work immediately associated with meetings of the Council or of its committees, the secretariat service is usually involved, in the examination of a number of problems designated by the Council. Some of these problems relate to legal and administrative features of the vital statistics system, while others extend to the general sphere of social statistics. As an illustration, the Secretariat made arrangements, on behalf of the Council, for a full investigation and redesigning of the present registration forms used by the provinces, involving collecting views, summarizing opinions, and circulating results to all Council members. One of the objectives of this investigation was the standardization of content, size and format of the records used by all the provinces, subject to local legal requirements, where some variation is inevitable. Since the records serve both legal and statistical purposes, provision must therefore be made for meeting both requirements. The anticipated benefits will be both administrative and statistical; there will be cost economies, a new

convenience in processing, a new ease of record exchange, economies in storage of the forms, and other advantages for the provincial administrators. At the same time the statistical usefulness of the schedules will also have been thoroughly reviewed.

The Mental Health Section is responsible for producing national statistics on admissions, separations and population on books of psychiatric in-patient facilities. These statistics are presented in the form of two annual reports: *Mental Health Statistics - Volume I, Institutional Admissions and Separations* and *Volume II, Patients in Institutions*.

A preliminary report on Mental Health Statistics was introduced during the year under review. This brief publication summarizes data on patient movement for all reporting psychiatric in-patient facilities by type of institution, province and sex. The over-all number of institutional respondents, for all of Canada, increased by 21 during 1969 to a total of 254.

Conversion of diagnostic tables to the *International Classification of Diseases, Eighth Revision, Adapted* and the proposed use of computer print-outs for photocopy were some of the important considerations that guided the planning of revised annual reports during the year.

Exploration was continued into the feasibility of including in annual statistics data on psychiatric patients treated in non-psychiatric wards of general and allied special hospitals.

Active study was initiated into the possibility of producing on an occasional basis separate reports on (i) psychiatric units of general hospitals, and (ii) treatment centres for emotionally disturbed children.

The Section answered numerous special requests originating with governmental and non-governmental organizations and private persons for information in many areas of mental health. In some cases special tabulations and bibliographies were prepared.

The Public Health Section, in carrying out its functions of measuring morbidity treated in general and tuberculosis hospitals and of enumerating the circumstances of the patients cared for, and also of following the course of certain specified diseases, has had to accommodate itself to a variety of reporting and social circumstances. Hospital morbidity is both general and comprehensive and covers millions of persons each year, so there has to be economy in processing and presentation. Reports of communicable diseases form the statistical basis of national

and comparative provincial and local surveillance systems, so speed in distribution of the aggregated figures to public health authorities is essential. Tuberculosis, an insidious disease, has always had a great potential epidemic capacity. For this reason, tuberculosis morbidity statistics combine prevalence, treatment and incidence into one series. Malignant neoplasms, which constitute a major health problem, and which are the focus of great deal of research, attack all body sites, sometimes in succession, and are often the subject of a combination of treatments. To begin to provide more specific statistical information about this disease group than that available from general hospital morbidity, the Section has just begun an incidence reporting system, with emphasis, in the beginning, on purification of a limited body of incoming data. The change in legislation for therapeutic abortions under Section 18, Criminal Law Amendment Act, 1969, led to establishment of a reporting system on numbers of abortions performed in the general and allied special hospitals. This arrangement, undertaken at the request of the Department of Justice, has been made in co-operation with the provincial hospital insurance commissions.

The Section has been represented on a federal "Working Party" on revision of hospital morbidity statistics and hospital admission/separation records. The Working Party was convened at the request of the Advisory Committee on Hospital Insurance and completed its deliberations with the recommendation of a new 188 category Canadian Hospital Morbidity List. This list represents an abridgement of the International Classification of Diseases, adapted for special application in Canadian hospital utilization studies. This group also considered matters relating to the standardization of definitions in use in hospitals.

In order to facilitate the meeting of special requests, the Section has tabulated a good deal of reference material, especially in the area of hospital morbidity, where the available information covers the whole range of diagnosed illnesses. This material is used to answer as many special enquiries as possible; other requests do necessitate individual compilations. The main thrust of the request has been on particular disease conditions and on the most affected demographic groupings. The requests have come from researchers into the cause, prevention and treatment of disease, and from administrators, policy-makers and members of the public. Inquiries, for example, have come from government departments and agencies, including hospital commissions, from Members of Parliament, from medical workers, from students engaged in research, from the news media and from individuals. Diseases that have figured prominently in the requests include the venereal

group, cancer, tuberculosis, endocrine disorders, chronic respiratory ailments and condition resulting from accidental causes. There have also been a number of enquiries from other countries.

The Section also undertook developments and expansions of its own output. It is collating morbidity information in areas such as chronic respiratory, and diabetes, where requests have indicated a strong demand for this type of specifically defined output. The Section also compiled information on venereal diseases to be used in a special report to be issued by the Department of National Health and Welfare. Another addition is the tabulation of hospital morbidity treated in the Yukon and in the Northwest Territories. This expansion is now in production with Indian, Eskimo and other origins being identified.

During the fiscal year the Public Health Section prepared the French manuscript for the "Classification internationale des maladies, adaptée" (Volume 1). One thousand five hundred copies of this reference book have been printed. The companion Volume 2 (Index) has been translated into French, all the medical terms having been converted to machine-readable form in preparation for computer sort and photoproof production. Both these Volumes will be distributed nationally as well as internationally by the Queen's Printer.

The Division was represented on a Committee, appointed at the Third National Tuberculosis Conference (1966) and working under the auspices of the Canadian Tuberculosis and Respiratory Disease Association, which prepared a "Classification and Reporting of Tuberculosis in Canada", a manual for use in chest clinics, hospitals, sanatoria and Departments of Health.

Annual meetings of this group are held to consider and propose changes in regard to the tuberculosis reporting system.

Respecification of the notifiable diseases reportable to DBS in terms of the new International Classification of Diseases (Adapted) was made and two diseases - measles and rubella - were added to the list. This evaluation of the adequacy of the list was carried out by the Epidemiology Division, DNHWS, with the collaboration of members of the Health and Welfare Division and representatives of the Advisory Committee on Epidemiology.

This group meets annually to consider new developments and needs in the field of notifiable diseases. In 1970 a new list of reporting cities was established for national reporting purposes, as well as several revisions in disease entity inclusions, particularly in regard to venereal diseases.

The twelve months ending March 1970 were ones of expansion and improvement in existing programmes and introduction of new programmes in the Institutions Section. A new series of computerized data tabulations based on the 1969 revised Annual Returns of Hospitals (HS-1 and HS-2) was developed, incorporating widespread use of direct photocopy methods, thereby reducing the time interval between survey and user availability. Section officers spent considerable time in formulating a new series of hospital indicators (ratios describing all aspects of hospital facilities, utilization services, staffing and finances), which will provide hospital administrators and others with a set of management and research tools that have kept abreast with the changing scene in Canadian hospitals.

Fundamental to the presentation of Annual Hospital Statistics was the creation of a new hospital classification (or breakdown), which again reflects more recent trends in hospital organization by presenting separately, for the first time, data on teaching and non-teaching hospitals and hospitals with or without long-term units, in addition to the established or customary arrangement by type of service. Size-groupings of hospitals according to their bed complement were also reorganized on the basis of an in-depth study.

During the year, considerable time was spent on the development in co-operation with the Canadian Association of Pathologists of a revised Canadian Schedule of Unit Values for Clinical Laboratory Procedures (1970). Additionally, each individual laboratory test was given a 5-digit number to be used across Canada as a common method of identification. Preliminary meetings with counterparts in the United States indicate that the Schedule and its concepts will be adopted for use by the United States hospital system.

Talks continued during the year with representatives of the Canadian Association of Physiotherapists and the Occupational Therapists on the joint development of a unit of measurement for physiotherapy and occupational therapy.

It was also the first full year for hospitals reporting to DBS on the Quarterly Hospital Information System. From correspondence and contacts with participating hospitals and other users (federal and provincial government associations, etc.) it appears that the programme has filled an otherwise serious gap in the availability of timely and meaningful hospital statistics in the form of indicators, necessary for good management and planning. In connection with the Quarterly Programme, the Section has introduced a bilingual publication using photocopy computer output. This will provide users with quarterly data on a

national, provincial and regional basis, shortly after the close of each quarter.

The year in review saw the Institutions Section enter further into the area of Health Manpower Statistics. A need for data on Public Health Nurses' salaries and academic qualifications as expressed by the Canadian Public Health Association and supported by the Canadian Nurses Association, led to the establishment of a Survey similar to that conducted annually for hospital nurses. A set of definitions and a questionnaire were designed by officers of the Section together with the Canadian Public Health Association, the Canadian Nurses Association and the Chief Nursing Consultant in Nursing Advisory Service of the Department of National Health and Welfare. For the first survey only official public health agencies (i.e. Department of National Defence, Department of National Health and Welfare, provincial and municipal departments of health, etc.) were surveyed, covering approximately 3,500 nurses. Computer outputs were received towards the end of the fiscal year and analysis is now proceeding. First publication of data showing salary ranges and averages by a cross-classification of category and training, by type of agency, should be available early in 1970.

The years 1969-70 saw the Section develop the Health Manpower Survey series with the first being on Registered Nurses, as a further step in the development of an over-all Health Manpower Programme. This was developed in consultation with the Canadian Nurses Association and is designed to integrate the requirements of the Departments of National Health and Welfare, of Manpower and Immigration, and the DBS Labour Division, as well as other appropriate national and provincial government agencies and associations. Based on approximately 150,000 individual annual registration forms, the first survey will provide annually such information as numbers, geographic locations, place and type of employment, academic qualifications and other employment characteristics. The design of the programme will allow in depth studies of the supply, educational levels and attrition rates of this major group of health manpower. Longitudinal studies on the geographic mobility, etc. through cohort studies of the groups will assist administrators in developing employment practices to retrieve those who have left the field for non-nursing activities. The programme, to be operational for the year 1970, should see its first publication early in 1971. The system has been designed to accommodate a number of other professional and technical health manpower groups. Arrangements are under way to introduce several other large groups into the system for the 1971 data year.

During 1969, another survey in the Health Manpower area was introduced by the Section, entitled "Survey of Educational Facilities for Health Occupations". This was formulated in conjunction with the Health Resources Directorate of the Department of National Health and Welfare, to assess the present and future potential supply of trained personnel for the health occupations in Canada. Included in the survey were hospitals, universities, community colleges, trade schools, regional schools of nursing, etc. Data are at present undergoing analysis and a report on significant findings will be forthcoming during the 1970-71 period.

Plans have been developed to automate the production of the annual list of Canadian Hospitals and Related Institutions and Facilities. The method would allow for continual updating of the list to account for closures, openings, changes in bed capacity, classification, etc.

Discussions were held with officials of the Canadian Council on Hospital Accreditation and other agencies on the definition and categorization of nursing homes in Canada, an area into which the Section will soon be expanding, as well as the Welfare Institutions field. Section officers were engaged in revising the Classification of Health and Welfare Organizations in the Standard Industrial Classification Manual, to ensure that definitions and classifications had kept pace with the changing scene in this area. Liaison was maintained with officers of the Public Health Section, Health and Welfare Division, towards the eventual production of a "melding" programme between hospital utilization, activities and costs and selected morbidity categories.

In addition to the aforementioned activities, the Section in its regular programme published the eleven annual reports on the hospital industry in Canada and the analysis is nearing completion on the 3rd Annual Salaries of Hospital Nursing Personnel. Many varied requests were handled from a wide cross-section of users of the Section's data, including those originating with management consultant firms. The Section during the past year contributed several original articles to a leading hospital journal.

Officers of the Section were also involved in a number of training seminars or institutions for hospital administration personnel to explain reporting requirements and the use and interpretation of data from the various programmes. Additionally, in concert with the Department of National Health and Welfare and the Canadian Hospital Association, Section officers participated in the development of uniform hospital terminology through a special working party with representatives from the hospital and health fields.

Judicial Division

The Judicial Section became a division on July 1, 1969. The principal objective of the Division is to measure the effectiveness of the judicial process: law enforcement, judicial procedures, rehabilitative services.

New programmes stress reduction of respondents' work load by devising reporting systems based on either "administrative-statistical" or "legal-statistical" forms which provide complete and accurate operational data, various means of feeding back to the respondents information for administrative or social research, and the integration of statistical series within provinces.

In connection with the adult courts statistical programme with Quebec, tabulation and relevant listings were made available to the Quebec Department of Justice. A probation reporting form, linked to the court and prison systems, was tested. Systems development was commenced for the adult court statistics programme with Alberta.

With regard to the Manitoba juvenile reporting programme, codes, coding and key-punch instructions as well as edit specifications were designed and tabulation requirements defined. An agreement was reached with British Columbia to process juvenile court statistics by means of a somewhat similar system. However, because of revisions to their Provincial Act such a system would increase the work load on respondents. An administrative statistical system is now being discussed and considered.

The Division responded to a request for technical discussions on a prison and probation reporting system for Nova Scotia. Detailed points of view on suitable form content and procedures to control such a form were exchanged.

Several studies have been undertaken or were in progress during the fiscal year 1969-70, notably the studies on penitentiary recidivism, robbery and crime rates. The penitentiary recidivism study was implemented at the request of the Department of the Solicitor General and the Chairman of the National Parole Board. It is the first survey of its type in Canada. The resulting trends, tendencies and projections will assist the Department of the Solicitor General in future planning.

The first listing of data derived from the revised national parole statistical programme was transmitted to the National Parole Service.

The two-year study on robbery ended in 1969. It extended the Uniform Crime Reporting

Programme to cover, by province and metropolitan area, all robberies and attempted robberies committed in various types of establishments. Its object was to facilitate analysis and co-operative planning at the local level with regard to this type of offence. Resulting annual data appeared in a supplement to Crime Statistics (Police).

The RCMP agreed to report all statistics for offences under the Narcotic Control Act and Controlled Drugs of the Food and Drugs Act, notably LSD, and to score them in conformity with the national system of uniform crime reporting.

Quarterly, semi-annual and annual tabulations on crime and traffic enforcement statistics were forwarded to Provincial Departments of the Attorney General, the UCR Committee of the Canadian Association of Chiefs of Police and the Quebec and Ontario Police Commissions. A Police Records Manual, prepared at the request of the Canadian Association of Chiefs of Police was approved by a work group of serving specialists in records and statistics, at a meeting held in December 1969. The manual, which is being prepared for publication, provides guidelines for records systems to ensure better statistical reporting.

Discussions took place with the President and Members of the Quebec Police Commission regarding the provision of extra copies of Uniform Crime Reporting forms to police respondents in Quebec for completion and submission directly to the Commission offices in Quebec City.

Under the Respondent Review Programme, field trips were made to police departments and courts. The objective of this programme is to encourage good reporting practices.

A time series analysis of crime rates in Canada was completed. This publication, the first of its kind, is based on the population sixteen years of age and over. It contains a description of the component movements present and aims at studying the secular, cyclical or seasonal element of the series in isolation with a view to estimating short-range forecasts of the number of persons convicted of indictable offences.

Provincial Liaison and Consultative Services

This Staff co-ordinates and initiates the Bureau's contacts with Provincial government departments, particularly in their capacity as producers and users of statistics, and responds to their requests for general or specific assistance. In addition, the Staff performs a co-ordinating role in the area of Travel, Tourism and Recreation Statistics.

The Co-ordinator and members of the Provincial Liaison Staff visited provincial officials in all the Provinces, participated in a variety of formal and informal meetings outside the Bureau, and organized meetings between provincial officials and appropriate staff in other DBS Divisions. Members of the Staff participated in a variety of internal Committee meetings which involved policy and programme developments affecting the Provinces. Consultative work was undertaken for some provincial departments. The major project undertaken by the Staff was a survey of all Co-operative Agreements between DBS and each of the Provinces.

In order to improve its liaison and consultative responsibilities, two Provincial Liaison Officers were appointed at the end of the year to operate from the Bureau's Regional Offices in Halifax and Edmonton.

As the Secretariat for the Federal-Provincial Conference on Economic Statistics, the Staff began preparations for the Seventh Conference to be held in Banff, Alberta, in May 1970.

The Co-ordinator and other members of the Staff were extensively involved in the preparation of a Bill to amend the Statistics Act.

The Staff is now the focal point in the Bureau for statistics in the field of travel, tourism and recreational statistics. An Assistant Co-ordinator (Travel) was appointed in January 1970. He acts as an alternate to the Co-ordinator as DBS representative on various committees concerned with travel statistics and research. He is reviewing the recommendations of a Consultant's Report on travel statistics commissioned by DBS, with a view to its implementation or rejection in some cases, and further study in others. The Assistant Co-ordinator (Travel) is a member of a Committee, with representatives from other DBS Divisions, which is looking into ways of improving travel statistics at the Bureau, initially concentrating its efforts on travel by air.

The Co-ordinator participated in the Federal-Provincial Conference on Tourism and in all meetings of its Technical Sub-committee, the First Canadian Travel Trade Congress, and in the annual meetings of the Canadian Tourist Association and the Western Council on Travel Research.

Plans have been well advanced by a variety of agencies for a major household survey on travel by Canadians. Members of the Staff contributed to the development of these plans. The Co-ordinator has also participated in the planning and execution of a series of

experimental interview surveys of tourists from the United States. The results of these surveys will assist in the planning for improved methods of data collection on a continuing basis in the future.

Special Surveys Division

The Special Surveys Division together with the support of eight Regional Offices located throughout the nation is responsible for all field survey activities within the Dominion Bureau of Statistics. Under the Division's direction, the Regional Offices engage in a wide range of activities to provide the nation and interested DBS Divisions with statistical information. Data are gathered in both report form from local business and through monthly surveys. The returns from the Labour Force Survey, the Consumer Pricing Surveys and the Job Vacancy Survey are important measures employed to satisfy the needs of statistics users while simultaneously directed to promote the use of statistical products.

The monthly Labour Force Survey involves 750 part-time interviewers who obtain information through personal contact each month with a sample of nearly 30,000 households scientifically selected as representative of all the geographic and economic regions across the country. These questions pertaining to labour force activity provide information for a monthly bulletin entitled "The Labour Force" which concerns itself with details of employment and unemployment in Canada and in the five major regions of the country. Special questions relating to matters of current interest are included in such monthly surveys. During the 1969-70 fiscal year, questions dealing with rents paid, household facilities and equipment, smoking habits, hours worked, paid workers, immigration and education were incorporated at the request of other divisions within DBS and of other Federal Government Departments. Similarly, special surveys were conducted. During 1969, 1,200 households were contacted monthly in the National Feed Expenditure Survey. Over 600 interviewers were employed in early 1970 by the Regional Offices to interview a sample of 22,000 Canadian households for the Family Expenditure Survey. This survey represents the second phase of a national expenditure survey programme and is at present, the most ambitious programme of its kind to be undertaken in Canada, covering the rural non-farm and farm as well as the urban population. Preparations have also been made to carry out the eleventh household Consumer Finance Survey at the beginning of the 1970-71 fiscal year. Previous questions were largely limited to the collection of income data, however, 1970-71

respondents will be interviewed on a wider range of financial topics to obtain complete records of family income, assets and indebtedness. Together the Family Expenditure and Consumer Finance Surveys will provide the most comprehensive record of family income, expenditure patterns, assets and debts ever compiled by the Dominion Bureau of Statistics.

During the year, the Job Vacancy Survey continued to develop its coverage of all economic sectors excluding agriculture and by

the fiscal year-end, the Job Vacancy Survey master files were virtually completed. As the initial profiling stage was concluded, manpower resources in the field were diverted to the increasing work loads of the follow-up interview phase.

The manpower commitment was similarly adjusted as the Regional Offices became involved in the numerous Census tests and trials which will considerably determine the specific procedures to be employed in the 1971 Census.

OPERATIONS AND SYSTEMS DEVELOPMENT BRANCH

The function of the OSD Branch was to provide the statistical and administrative branches of DBS with professional and technical skills and equipment services which could not economically be decentralized. The Data Processing Services Division provided both mechanical and electronic data processing services, from peg-board additions and other desk calculator work through data conversion to modern computing. The Computer Systems Development Division provided the professional advice and skills to permit users to determine whether projects were suitable for computer processing, and how the computer system should be designed, and to programme systems for the computer in use. The Management Services Section provided advice on the organization and use of office and field staffs, and the development of administrative systems. The development and administration of these activities were directed and co-ordinated by a small-branch headquarters staff.

The year 1969-70 was a year of introduction of new equipment and adaptation to its use. The principal change was the installation of the IBM S/360-65 computer in June 1969. This change required the conversion or adaptation of all the ongoing computer work of DBS from the IBM 705-III and IBM S/360-30 computers to run on the S/360-65, which placed a very heavy strain on systems and programming resources and hampered the development of new applications for an extended period. With the help of a 7080-705 emulator installed on the new computer, it was possible to take the 705-III out of service at the end of September 1969, and the S/360-30 machine was substantially free of DBS work by the end of 1969.

The introduction of the S/360-65 required extensive retraining of the computer operating staff in the Data Processing Services Division and of the analysts and programmers in the Computer Systems Development Division. This training actually commenced towards the end of 1968, and continued throughout 1969-70, with heavy reliance on the courses and facilities

available from IBM without charge or at nominal charge. The limitations of this type of training soon became evident and this, together with the IBM "unbundling" announcement, led to consideration of alternative and potentially more effective training techniques. A contract was let to Kates, Peat, Marwick for the development of a systems analysis course tailored to DBS needs (no suitable course was available on the market), and a decision was taken to use the new video-tape training technique to meet much of the need for orientation, programmer and operations training. Many suitable tapes were obtained from Advanced Systems Incorporated, a firm specializing in video-tape production, and a start was made on outlining the supplementary needs of this programme for in-house or contract development.

The basic training and education for use of the S/360-65 was further supported by development of a comprehensive standards and procedures manual, an informal reference library for staff of the Branch, and by a number of organization changes designed to improve and monitor the improvement of necessary technical skills. An Advisory Services Group was established in the Computer Systems Development Division in May 1969, to assist user divisions in developing initial project specifications and estimates and to monitor the development of computer projects. The establishment of this group also made it possible to start an experimental programme of "contracting out" specific programming tasks. Although this programme was on a relatively small scale in 1969-70, it produced satisfactory results and proved very cost-effective. Plans were made for its expansion in 1970-71.

In October 1969, responsibility for programming and for systems analysis was assigned to different groups within the Computer Systems Development Division, and responsibility for programme maintenance transferred to the Data Processing Services Division

(though this group was still manned by Computer Systems Development Division Staff on a rotation basis). This provided a framework for the further training of selected staff in systems analysis techniques and approaches, and for careful monitoring of the development of skills in this area, and also for reviewing the adequacy and the documentation of "completed" computer programmes and systems. The initial need for this monitoring was confirmed by experience; during the latter months of 1969-70 few analyses and almost no sets of programmes were accepted without modifications or improvements in documentation being made at the "review" stage. By March 1970, this situation showed significant improvement.

Although the new computer was the focus of most work during 1969-70, this was not the only equipment change. Experience with the Keytape machines introduced in January 1969, was encouraging, but not without some difficulties in the DBS large volume environment. Early in 1969-70 a multiple keyboard key-to-tape device was announced by Consolidated Computer Services, a Canadian firm, and it was decided to replace the Keytape units and some additional keypunches by a 16 keyboard Key Edit unit. This machine was installed in March 1970, and was expected to improve cost-effectiveness in the data conversion area. A second IBM 1032 optical mark reader was also acquired during the year to permit processing of the Labour Force Survey on newer equipment than the 1951 Census Document Punch, which was

becoming increasingly difficult to maintain. Improvements were also made in other unit record and desk calculating equipment.

Staff of the Branch also supported two important external projects. In October and November 1969, the Director of the Data Processing Services Division participated as the Data Processing Advisor on a six-member World Bank Statistical Mission in Pakistan. In December 1969, the Canadian International Development Agency purchased the S/360-30 computer which had been in use at DBS for shipment to the West Indies where it will be used to process their 1970 Census. DBS kept this machine in operation in the latter part of the fiscal year to aid in the training of selected operators and programmers from the West Indies, so that some experienced staff would be available when the machine was installed.

The work of the Management Services Section was again largely outside the data processing area in 1969-70. Among the more important projects handled during the year were the development and planning of operational procedures for the DBS Progress Reporting and Cost Accounting System, and a methods study and work measurement programme during and after the October 1969, Census tests. The staff also remained involved in several aspects of planning for the new DBS tower, and participated in the initial systems analysis training courses in January-March, 1970.

ADMINISTRATIVE SERVICES

Under this general heading are found a number of functions which serve the Dominion Bureau of Statistics as a whole, including personnel administration, management progress reporting and cost accounting, bilingual development, administrative planning, records management, financial control, publications distribution and office services such as the addressograph unit, stenographic pools, supplies, mail and messenger services.

Personnel Administration

Staffing Section

The Staffing Section accepted delegated authority for staffing positions in the Administrative and Foreign Service Category at the junior and intermediate levels. Coupled with last year's acceptance by the Bureau of delegated authority for the Administrative Sup-

port Category, the Bureau is now responsible for staffing 80 per cent of its positions, under delegated authority.

This year saw the introduction of selection standards for all occupational groups in the Administrative and Foreign Service Category. Added to the already existent standards for the Administrative Support Category introduced in 1968, and those anticipated within a few months in the Economist, Statistician, Sociologist Group and the Social Science Support Group, all selections within the Bureau will be done against formal and scientifically prepared guidelines.

A total of 1,127 employees were hired during the year, 110 of which were Statisticians or Economists. In addition, 574 term employees were hired. During the same period, 748 employees terminated their services, 67 of which were Statisticians or Economists. There were 3,150 continuing employees on staff at the end of March, and 519 casuals. During the summer of 1969, 289 students were employed.

The Staffing Section conducted 269 closed competitions and two interdepartmental competitions which resulted in the promotion of 381 employees of the Bureau. In addition, 348 employees were promoted without going through the formal competition process, for a total of 729 promotions. During the year, 18 employees exercised their rights of appeal; 11 appeals were registered in closed competitions; one in interdepartmental competition; and 6 against recommendations for promotion without competition. Of these, nine were dismissed; six were allowed and three were withdrawn by the employees.

Classification Section

The Classification Section evaluated 1,509 positions during the fiscal year 1969-70, compared to 495 in the previous year. This startling increase resulted primarily from the introduction of a more flexible system of manpower control. The 810 new position files created during the year brought the total classification files to 3,900. Of this number, however, only 3,150 are filled. In addition, all casual positions must now be classified with 200 having been evaluated during the year.

The conversion phase of the classification programme is now complete with the exception of a few Librarian positions and a number of Statistician positions slated for the Mathematics Group.

Two Job Analysis and Job Evaluation courses were conducted. Each course was of a one-week duration with a total of 80 people receiving the course. On-the-job training was provided for six apprentice classification officers. This training lasted from 4-6 weeks per student.

Twenty-eight classification grievances were handled during the fiscal year. In addition, a considerable number of man-days were expended in representing the department in Classification Division Review Boards.

Staff Relations

Fourteen collective agreements covering DBS employees in the Professional and Scientific, the Administrative and Foreign Service, the Technical, and the Administrative Support Categories were introduced during the 1969-70 fiscal year bringing the total to sixteen in the Bureau.

Incentive Awards

During the year, 22 new suggestions were received from DBS employees of which one was

rejected; the balance are under investigation or waiting implementation. Two suggestions from the previous fiscal year were implemented and given cash awards amounting to \$1,800.

Manpower Planning and Utilization Section

A formal manpower planning unit was formally established during the year to provide an increased capability in this vital field with an initial focus on manpower forecasting and analysis. The development of a departmental manpower inventory is now well under way and planning for the introduction of a comprehensive employee appraisal programme has commenced.

The manpower utilization planning and monitoring activities performed during the year were quite successful, as indicated by the fact that over 99 per cent of the 3,585 man-years allocated to the department were utilized.

Staff Development and Training

During the fiscal year 1969-70, all training available through this section was reviewed and organized into four Development Programmes: professional, technical/clerical, management, and data processing. In the area of professional development, a full series of seven mathematical courses and an orientation programme for professionals was developed. They will be in full operation next year.

After less than two years of conducting its own management training, DBS has now progressed to almost full autonomy where even course materials are all prepared and reproduced in the Bureau. This training has received full endorsement by senior professionals of the Bureau through their active participation as course lecturers. There is great demand for the management/supervisory courses. Positive steps are now being taken to evaluate this training.

The Technical/Clerical Development Programme is now well established in terms of elementary statistics and accounting courses. In this area, current demand exceeds available resources and a priority system of selection had to be established. At present, the section is participating in the evaluation of a programmed instruction statistics course which, if proven satisfactory, could ease the load considerably.

A major data processing training programme is currently under way. Video-tape equipment has recently been purchased and is being used in relation to this training.

Enrolment in language training was almost twice as large this year as last and

the intake ceiling will increase considerably again in the next fiscal year.

University extension courses during off-hours have become a major part of the employee development plan with 170 participating in the fiscal year 1969-70.

Management Progress Reporting and Cost Accounting System

For some time senior Bureau managers have realized that more detailed management information was required to provide an improved base for control, analysis and planning, including a relation between cost and end product. It was also considered that matters of progress reporting and timeliness should be approached in a co-ordinated and comprehensive manner. As a result of these considerations and in view of the fact that Bureau activities, which cover virtually every aspect of Canadian life, are increasing in scope and complexity, it was decided to adopt a systems approach to the provision of management information.

The System which is to be introduced April 1, 1970 consists of three main modules of resource utilization, progress reporting and timeliness of publication release, as these were identified as the major areas of concern. The main objective of the System has been identified as the provision of detailed information to the various levels of management as an aid to improved planning, control and analysis. It was further considered that these increased capacities would assist in the achievement of multi-project control and the optimum utilization of resources. The System which is fully automated, including the optical scanning of all employee Weekly Work Reports, was designed and developed, based on the principles of simplicity for ease of introduction and flexibility, to facilitate future development.

While the possible immediate and potential uses of the System have not been fully identified, some of the major possible benefits would be: to provide a basis for improved planning in which resources utilized will be related to end products; to supply a portion of the basic data required for cost benefit analysis and priority setting; to compare resources as expended and progress and timeliness as achieved by project, operation and organizational unit with plans to indicate deviations; to permit detailed analysis of the types of work performed which could indicate areas for automation, sampling, etc., which might be introduced or increased; the production of predictive models and review of alternative methods of conducting statistical projects; and, to supply the basic data for a system of recovering fees from outside users.

The System is based on the elements of projects, operations and organizational units. These three elements will permit the output of the System to be accumulated into what is considered to be the most meaningful combinations. Of these elements, the 500 statistical projects that have been identified are the foundation of the System. Each statistical project in itself consumes significant resources, can be identified with an end-product or benefit and the sum of all statistical projects represents the approximate statistical output of the Bureau. In addition to the projects, seven standard types of work, or operations, performed within the Bureau have also been identified - plan/develop, co-ordination, collection, edit/code, compilation, analysis and publishing. This additional dimension when applied to individual projects will permit further detailed analysis of Bureau undertakings. The third element of the System is the association of projects and operations with organizational units.

The System is to be introduced in a simplified form April 1, 1970 with the remaining modules being introduced gradually over a number of months. By April 1, 1971 all modules of the System should be operational.

Bilingual Development

During the 1969-70 fiscal year, 242 DBS employees were slated for Language Training with the Language Bureau of the Public Service Commission. Eleven are either beginning or have completed their fourth level, 58 students are at the third level, 70 at the second level and 103 at the first level of the programme.

Despite the fact that the Advisor on Bilingualism resigned from the Department on June 2, 1969, and a successor was brought on staff on January 5, 1970, retention activities within the Department, although reduced, were carried on by the monitor librarian at a continuous rate of 35 employee-period every week. A number of bilingual employees also act as tutors for small groups of language trainees when they return from the language schools.

In February 1970, the Department undertook the inventory of bilingual proficiency on staff. Three casual test administrators underwent specialized training at the Public Service Commission before starting the test administration to 1,200 DBS employees who claim some proficiency in their second language. This phase is expected to be completed by July 31, 1970.

Efforts are being made to staff some sections of the Bureau with as many bilingual

employees as to ensure services in both languages to the public. The Ottawa and Montreal Regional Offices have been completely staffed by bilingual employees and the Staffing Section of Personnel Administration is offering its services in both languages.

At the present time approximately forty per cent of the DBS statistical publications are issued in bilingual form. The objective is to issue 100 per cent of the publications in both languages as soon as possible.

Administrative Services Planning

Accommodations

Plans for the new 25 storey DBS Tower to be located south of the existing building are nearing completion. The building will go out to tender in May 1970.

Renovations of the second floor of the existing building will be completed in June 1970 at which time the Census Division is expected to occupy part of the space. Twelve floors of the General Purpose Building were occupied in January by the staffs displaced from the 2nd floor of the existing building.

Records Management

The Records Management Section established a programme to install and operate standard filing systems in all divisions throughout the Bureau. It is estimated that this programme will take three years to complete. A competent supervisory nucleus was recruited and clerical staff assigned to divisional records units as these were set up. Records of each division are inventoried and evaluated to facilitate the establishment of retention periods as each divisional records unit is created. Eight records units were set up during the year.

Financial Services

This section has two main functions which are performed by the Financial Unit and the Publications Distribution Unit.

The Financial Unit is concerned with the over-all financial operation of the Bureau, including the co-ordination of the Programme Review and Main Estimates and the maintenance of a Financial Management Information System. The unit examines and controls expenditures, audits travel claims and commercial accounts, interprets financial regulations and serves as adviser in the area of finance to line man-

agers. During 1969-70 the responsibility for full pre-audit, allotment and commitment control was transferred from the Comptroller of the Treasury (Department of Supply and Services) to DBS.

The Publications Distribution Unit is concerned with the sale and distribution of DBS publications and maintains current mailing lists for distribution of publications and subscription statistical reports. During the fiscal year 1,998,428 pieces of mail were dispatched and 39,060 mail orders were received. The subscription mailing list is currently made up of 223,744 addressograph mailing plates.

Office Services

During the fiscal year, 620 requisitions were issued to the Department of Supply and Services for furniture and equipment, and building services for which they are responsible, and 562 were completed.

In the same period 334 requisitions were issued to the Government Telephone Service of Treasury Board for telephone service and 307 were completed. As of February 28, 1970 the total number of locals in use by the Bureau, including the Ottawa Satellites was 445, with 778 extensions. Existing key systems now number 115.

During the same period Office Services was responsible for the major moves and relocation of subject-matter divisions both within the Main Building and to the General Purpose Building. These moves entailed considerable planning, space layout, consultation, co-ordination and movement of entire staffs, with the minimum of work stoppages.

The Supplies Unit submitted 2,259 printing and stationery requisitions to the Department of Supply and Services and other sources for an estimated value of \$1,381,244.54. The Supplies inventory at March 31, 1970 was \$52,960.41; the annual stock turnover rate, therefore, was 26.08. Replacement value of DBS office machines and equipment based on original cost was \$1,136,057.

The Addressograph Unit addressed 15,968,648 forms for various Divisions of the Bureau. In addition, 199,232 plates were embossed, 147,618 corrected, and 576,504 plates were deleted. Also, 4,453,898 pieces of mail were inserted by machine and 6,896 were inserted by hand. Forms processed by Heat Transfer Media increased from 2,784,676 for the previous year to 6,912,869 for the current year, a difference of 4,128,193.

The Mail Unit deposited 27,814 bags of mail with the Post Office and received 13,659 bags during the year. In addition to mail for delivery in Canada, 33,797 pieces of registered mail, 20,236 air mail, 2,966 special delivery, 5,342 parcel post and 14,509 foreign mail were despatched. Also included in mail despatched were 3,148,115 pieces of mail for the Department of Agriculture. Mail received included 7,252 pieces of registered mail.

During the year a third vehicle was added to the DBS Truck Fleet to handle the increased volume of departmental trucking. This vehicle has travelled 4,772 miles since it went into operation. Transportation of DBS employees between No. 5 and 8 Temporary and Main DBS Buildings amounted to 2,143 passengers.

During the period under review, the Xerox Unit completed work on 36,588 jobs for a total of 1,254,134 copies. This does not include the Xerox facilities located in Central Registers Section, Operations and Systems Development Branch, Library, Personnel Administration, Administration, Census Division, Economic Statistics, Air Statistics, and Central Planning and Programming Staff.

The Drafting Unit prepared 2,652 graphic illustrations by means of charts, maps, publication covers, pamphlets, for the Divisions of the Bureau, other Departments and Agencies of the Government. In addition, the Unit completed a series of charts for the Royal Commission on the Status of Women. The colour art work prepared by the Unit of the Armorial Bearings and Floral Emblems of the Provinces and Territories was used by the Secretary of State Department for reprint and world-wide distribution. Colour maps of foreign and coastwise movements of the eight most significant commodities, which were prepared by the Unit, were used by the Department of Industry, Trade and Commerce for publication.

Typing and Transcribing Services include six Typing Units as follows: two located in DBS, one in No. 5 Temporary Building, one in No. 8 Temporary Building, one in the Congill Building and one now located in the General Purpose Building.

The new system of work measurement (based on predetermined standards) introduced April 1, 1968 in all Typing Units is proving quite satisfactory and is providing more realistic and much needed data which are valuable in assessing the relative efficiency of each operator as well as total staff requirement, produce accurate figures of composition costs and many other data on which reliable estimates are based. During the fiscal year under review, 168,887 pages were produced, broken down as follows: original letters typed: 66,321; form letters addressed: 60,997; pages of publications (partial pre-prints): 20,626; complete pages of publications: 20,943.

During June 1969, a second Telex machine was installed for incoming messages only in order to increase the availability of the first machine for transmittal purposes. Increased volume, accompanied by increased efficiencies of operation, are proving an asset to the Bureau. During the fiscal year under review, 8,089 messages were transmitted.

Printing Liaison Services examined, processed and prepared for printing, 14,957 pages of copy of publications.

In the Forms Management Unit, the 54 per cent increase in the number of pages of forms and questionnaires processed during the past year was accomplished, with the co-operation of the Manufacturing & Primary Industries Division, by having 1970 schedules reprinted with only minor changes. This "hold-the-line" decision was made so that Industry requirements would not conflict with the 1971 Census of Canada printing deadlines.

A Forms Analyst was again assigned to the Census Division to provide technical assistance for the 1969 Census tests. Upon completion of these tests, two Analysts were engaged for six months on the study, layout, testing and production of the 1971 Census of Canada questionnaires (long and short) designed exclusively for the "FOSDIC" type optical scanner. This is the first time these documents have been designed and produced in Canada.

Specialty forms have again shown an annual increase in usage with a trend to the more sophisticated computer print-out types of forms.

DOMINION BUREAU OF STATISTICS SENIOR OFFICERS

(As of March 31, 1970)

Dominion Statistician Walter E. Duffett

Assistant Dominion Statistician (Integration and
Development) S.A. Goldberg

Assistant Dominion Statistician (Finance and
Administration) H.L. Allen

Assistant Dominion Statistician (Socio-Economic
Statistics Branch) L.E. Rowebottom

Director General (Operations and Systems Develop-
ment Branch) L.A. Shackleton

Director General (Economic Accounts Branch) E.B. Carty

Director General (Financial Statistics Branch) G.A. Wagdin

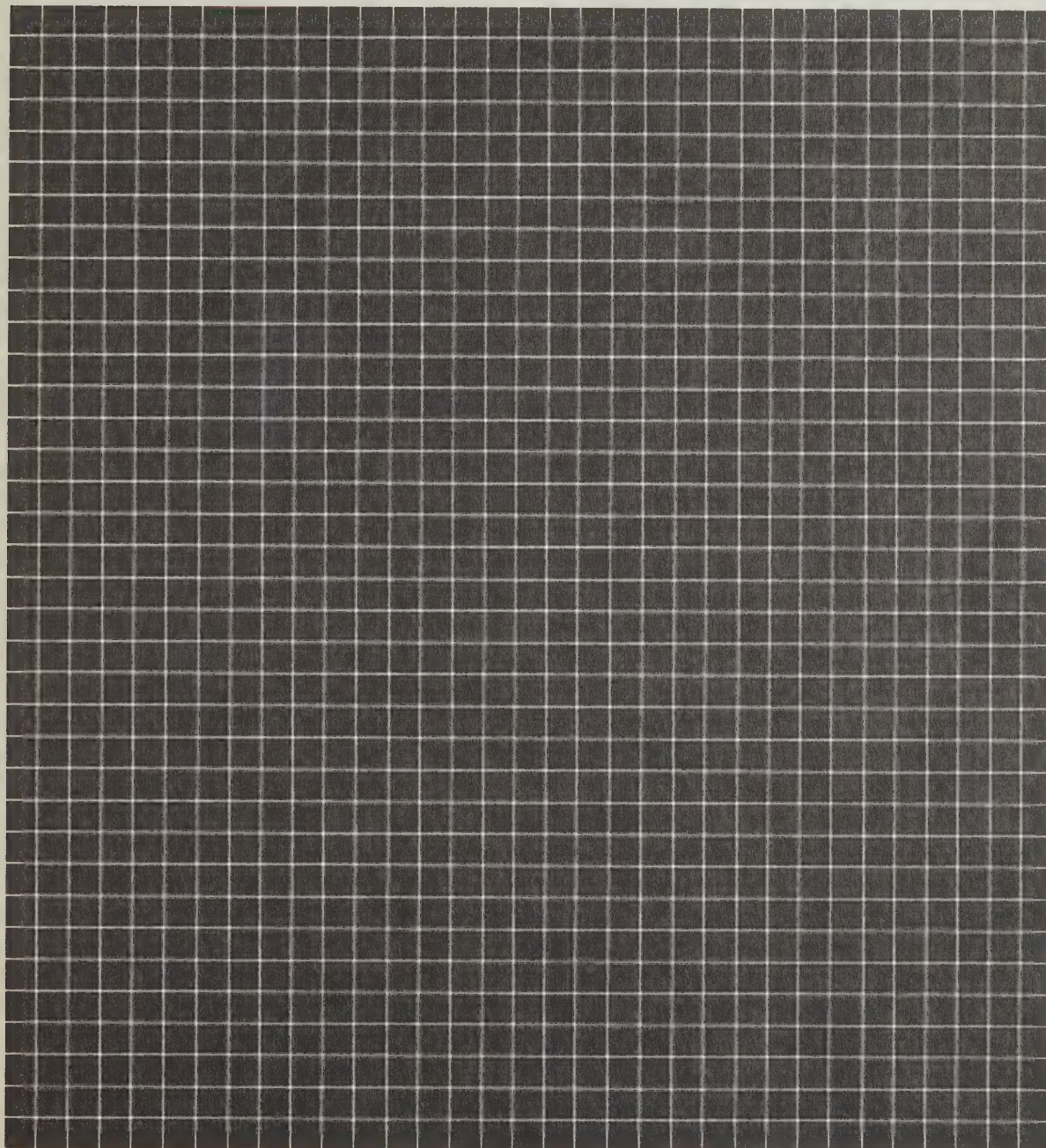
Director General (Economic Statistics Branch) V.R. Berlinguette



Dominion Bureau of Statistics

Annual Report

For the Fiscal Year ended March 31, 1971



CATALOGUE No.

11-201



ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1971

October 1972
0001-502

Information Canada
Ottawa

THE HONOURABLE JEAN-LUC PEPIN, P.C.,
MINISTER OF INDUSTRY, TRADE AND COMMERCE,
OTTAWA, CANADA.

Sir:

I have the honour to submit the Annual Report of the
Dominion Bureau of Statistics covering the operations and
services rendered during the fiscal year ended March 31, 1971.

Respectfully submitted,

Robert E. Duffett.

Chief Statistician of Canada

Ottawa, Canada
May 31, 1972

GENERAL ACTIVITIES

The year 1970-71 witnessed the consideration and approval by Parliament of a new Statistics Act, incorporating a basic review of the needs of users, the growing importance of the provinces and the experience of the Dominion Bureau of Statistics with the previous legislation. It is a tribute to the foresight of those who drafted previous versions of the Act, in particular to R.H. Coats who prepared the first Act of 1918, and to understanding by legislators of the objectives of the organization, that the basic principles of the legislation remain untouched, the changes reflecting new opportunities, such as the increasing use and importance of income tax data, and new structural developments in the national statistical structure with the growth of statistical offices in many of the provinces. Access to corporate income tax returns had been facilitated since 1965 through the Corporations and Labour Unions Returns Act (CALURA) which was administered by the Dominion Statistician. Also, access to "personal" income tax returns was becoming an increasingly urgent matter because of the importance of unincorporated businesses (which provide financial statements as part of the return), and because of public interest in personal income distribution. The new Act sets up improved procedures for co-operative arrangements with the provinces, of great importance in avoiding duplication of questionnaires sent to business firms.

The new Act was assented to February 11, 1971 (proclaimed May 1, 1971). The title of the organization is changed from Dominion Bureau of Statistics to Statistics Canada, with a transitional period during which both titles may be used. This provision was of particular importance in connection with the 1971 Census, for which advertising and

questionnaires had to be printed before the passing of the new Act.

Preparation continued during the year for the 1971 Census of Population, Housing and Agriculture, details of which will appear in the next Annual Report.

The balance of the year's activities consisted, as usual, of a great diversity of programmes designed to strengthen the statistical system, and to adapt it to the growing and changing needs of users. Among basic long-run projects was the completion of the first Canadian Occupational Classification and Dictionary of Occupations, a joint project with the Department of Manpower and Immigration. Statistics of the Real Domestic Product were converted from a quarterly to a monthly basis, DBS being the first major statistical agency to take this step.

The organization naturally attaches great importance to its relations with users, and improvements in this respect occurred throughout the year. In addition to the Statistics Use Officers established some years ago in our Montreal and Toronto Regional Offices, further officers were established in Vancouver and Winnipeg, together with strengthening of Head Office staff in this field. A somewhat similar function is performed by Provincial Liaison Officers in respect of provincial governments, and this staff was also strengthened during the year.

As the organization grows in size and complexity, increased delegation by the Dominion Statistician becomes appropriate. In these circumstances the organization becomes continually more dependent on the dedication of staff at all levels, which is gratefully acknowledged by the Dominion Statistician.

STATISTICS USE AND INFORMATION SERVICES

Included in the responsibilities of Statistics Use and Information Services are improvement of the quality of the uses of DBS information in society and the extension of such uses among marginal and non-users; improvement and maintenance of good relations with respondents to DBS surveys, publicity, public relations and information activities for DBS; the compilation and publishing, in English and French, of the comprehensive reference volume the *Canada Year Book*, publication of the handbook *Canada*, and the pro-

vision of library services to DBS, other research workers and the public.

Statistics Use Development

The Statistics Use Development Section continued to operate within the following broad objectives:

(1) Assisting major users of DBS data to improve quality of uses by providing

background information on concepts, definitions, methodology and other technical aspects of the data, by investigating availability of non-published data and by establishing dialogue between users and subject-matter divisions.

(2) Research into who uses DBS information and how it is used, by conducting occasional surveys of respondents to advertising campaigns, and surveys of subscribers to selected publications, and by conducting numerous visits to established users and reviewing current relevant literature on the subject.

(3) Development of additional uses of DBS information, particularly in the business community, through visits, seminars, and lectures so that the output of DBS may receive wider application.

(4) Providing subject-matter divisions with useful comment and criticism received from users of our data regarding the value of the data as it relates to decision-making so that these criticisms may be considered in the design of future statistical programmes.

In addition to the above, the Section was involved with presentations regarding the scope and uses of DBS data to various academic and research institutions and was involved with the organizing and presentation of seminars to various user groups who visited the Bureau. Some of these organizations included the Financial Research Institute, Sir George Williams University, Université du Québec, University of British Columbia, University of Toronto, University of Western Ontario, Toronto Area Research Council, Ryerson Polytechnical Institute and Algonquin College.

During the year Statistics Use Development Officers were established at the Vancouver and Winnipeg Regional Offices to meet the demand for technical assistance in using our information, to locate and encourage new users, and to provide professional consultation and contact at the regional level. In addition, an Officer and Research Assistant were added to the headquarters staff in order to meet the demand for user assistance originating in the headquarters' area, and to provide back-up research services to the Statistics Use Development Officers in the field. Although the Section works primarily with users in the private sector, significant assistance was provided to municipal governments and planning boards regarding access to and uses of DBS data. In addition, some assistance was provided to provincial departments in co-operation with Provincial Liaison Staff.

Information Division

During 1970-71, the Information Division continued its functions of providing promotional material in support of DBS activities, and greatly intensified its programmes related to the 1971 Census.

Improved scheduling and production procedures, in the Publication Services Section resulted in faster release of information, increased timeliness and usefulness of material in the *DBS Daily* and the *DBS Weekly*. Circulation of the *DBS Daily* increased from 2,800 at March 31, 1970 to 3,100 at March 31, 1971. During the same period, circulation of the *DBS Weekly* increased from 7,850 to 9,900.

Other activities of the Publication Services Section included publication of the *Statistical Observer* and a review of the distribution policies for DBS publications.

During 1970-71, the Publicity Services Section was heavily involved in publicity, public relations and advertising activities for the 1971 Census. The Unit prepared promotional material (booklets, folders, posters, press releases) containing information on the methods and purposes of the census to increase Canadians' awareness and acceptance of it. Explanatory material, to be used to help respondents complete census questionnaires, was also prepared by this Section. In addition, the Section is co-ordinating the regional publicity programmes for the census.

Arrangements for the 1971 School Census, a voluntary project in which school children are introduced to the census and have an opportunity to complete a special questionnaire, were undertaken by the Publicity Services Section. Activities of this programme included writing letters to teachers and provincial ministers of education, preparing instruction kits for teachers and co-ordinating the distribution of questionnaires.

The material to be used by census workers, both for their own information and for distribution to respondents, was also prepared in this Section.

Publicity Services also helped promote the work of other DBS Divisions by preparing advance publicity and follow-up reminders for surveys, by informing the general public of the role of DBS.

During the year, the Art and Design Unit of the Information Division continued its work in the preparation of bulletin covers, survey folders, questionnaires, reminder cards and audio-visual displays

for all DBS Divisions. Much of the work of this Unit during 1971 also was the designing and production of census material — posters, information folders, Census Representatives' kits and manuals, questionnaires and follow-up postcards.

The Inquiries Section is the prime DBS centre of contact for both private and public sectors, handling in its normal course of activities some 1,600 inquiries each month. These originate by mail, telephone and through personal approach.

Each of the inquiries is dealt with on an individual basis according to merit and requirement. Elementary requests usually require a minimal time allotment; the more complex queries, however, involve research of DBS reference matter, consultation with other governmental and private sources, and special compilations and other related activities. While most of the inquiries originate in Canada, many emanate from foreign countries.

The Inquiries Section was heavily involved in the processing of late arrivals of coupons generated by last year's advertising programme designed to extend the uses of DBS information. A special advertisement carried in "Foreign Trade" also resulted in a number of inquiries which were processed in this Section.

Also, the Section embarked upon a complete revision of the Bureau's catalogue of publications, and at fiscal year end approximately 60 % of the manuscript was ready for print. The new catalogue will feature separate English and French subject and commodity indexes. The Section plans to issue a new catalogue in January each year.

Supplements to the catalogue, which serve to update the catalogue, showing new titles issued, titles discontinued, and changed titles, were published at two-month intervals during the year. The Section is collaborating with the Census Division in the production of a special catalogue of 1971 Census publications.

Year Book Division

The programme of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official basic reference reports on Canada, the *Canada Year Book* and the handbook *Canada*, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study. Because of budgetary restrictions, no edition of the *Canada Year Book* was published in 1970, and a combined 1970-71 edition will be released in the middle of 1971. The handbook *Canada 1971* was prepared for publication in January but, because of technical difficulties, its release was delayed to April 1971.

A Special Inquiries Unit, based on the *Canada Year Book* coverage of Canadian data and other authoritative DBS sources, supplied a regular series of statistics for the United Nations Statistics Monthly Bulletins, the United Nations Statistical Yearbook and also to the International Labour Office. In addition, it provides up-to-date revisions of Canadian statistical and textual material for many standard national and international reference works and dispensed current and historical data in response to multi-subject inquiries received by the Bureau.

The Library of the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff, research workers and the general public. It also has an extensive collection of statistical publications. A study of library services and operations was undertaken in co-operation with the National Library with a view to examining the advisability and practicability of improving services for departmental users, for other government departments, and for the general public. The results of this study are contained in a report, the recommendations of which are currently being examined by DBS management.

DATA PROCESSING SERVICES DIVISION

In the fall of 1970, the data processing activities of the Dominion Bureau of Statistics were reoriented and the Data Processing Division was designated as a unit reporting directly to the Dominion Statistician. This has also meant a reorganization within the Division to reflect the full responsibility for providing a service to the

user divisions of the Bureau. This service has involved the operation of the data processing facility to process the material originating with the user divisions and also the provision of a user consultant service to assist in the resolution of software and hardware problems. A Research and Development Section was organized to

assess equipment and techniques in relation to Statistics Canada needs, to review and update systems and procedures and to anticipate future requirements for data processing capability.

The Division provides a variety of equipment and techniques for the processing of data gathered by the subject-matter divisions of the Bureau. When a minimum of cross-classification is required, aggregates and averages may be obtained by peg-bar methods of compilation using desk calculators. For projects involving more complex cross-classifications and manipulations, the Division uses a large-scale computer with its attendant peripheral equipment. The IBM S/360-65 computer installed in mid-1969 operates on a 5-day week, 24-hour day basis. To meet the increasing volume of work the core memory available in the system was increased from 512,000 to 768,000 in July, 1970, and to 1,024,000 in December 1970. By the end of the year, March 31, 1971, the work load was such that occasional overtime was required on Saturdays and Sundays to meet peak loads and established target dates.

In the area of computer input preparation, a key-edit system was acquired in

March 1970. With this system, 16 operators working simultaneously, transfer data from original documents onto magnetic tape. By mid-1970, initial difficulties with the system were resolved and productivity increases of up to 25 % were achieved dependent upon the application. A second unit of 16 keyboards was added before the end of the year.

The Division co-operated with the Canadian International Development Agency in the installation of a S/360-30 computer in Kingston, Jamaica, for the processing of the 1970 Census of the West Indies. This equipment was formerly installed at the Dominion Bureau of Statistics. Consultant advice was provided, both in Ottawa and in Kingston, Jamaica, concerning the preparation of the Jamaican site. The equipment was successfully installed and a team of four from the Bureau was made available in Jamaica to assist with the initial generation of the operating system, the hands-on instruction of Jamaican personnel and the organization of the initial processing of census data. The Computer Centre, at the University of the West Indies, is operating successfully with local personnel.

INTEGRATION AND DEVELOPMENT STAFFS

The following staffs are attached to the office of the Assistant Dominion Statistician (Integration and Development Staff): Central Classification and Company-Establishment Integration; Econometric Research; Regional and Manpower Research; Consultant on Demographic Research; Central Planning and Programming; and the Methodology and Systems Branch. A review of the activities of these groups follows.

Central Classification and Company-Establishment Integration Staff

The Division's work falls into three main areas: The Classifications Section maintains and revises existing statistical classification systems, adapts them for special purposes, and develops new classifications: the Company-Establishment Integration Section is concerned with the relationship between statistics based on surveys of establishments (usually operating units within a company) and statistics obtained from financial statements for companies as such; the Central Registers Section develops and maintains a central list of all businesses, institutions and similar organizations engaged in economic activity in Canada including their establishments.

The Classifications Section is concerned basically with four standard classifications. They are: The Standard Industrial Classification, The Standard Commodity Classification, The Standard Geographical Classification and The Canadian Classification and Dictionary of Occupations. Each of these classifications provides a detailed set of groups and classes for the entities appropriate to its field of application. They are essential for the efficient use of statistical data in that they provide a means of making data comparable through common definitions and of eliminating gaps in coverage.

During the past year the Section has been involved primarily in preparing revised editions of the classification manuals. The decennial census (1971 in this case) serves as a benchmark year for many of the statistical series produced by DBS and the classifications are revised in advance for this occasion. These classifications will be introduced to all relevant statistical programmes as soon as feasible.

A revised edition of the Standard Industrial Classification was released during the year and the Canadian Classification and Dictionary of Occupations was delivered for

printing, culminating a massive research and development programme extending over five years. The CCDO programme is a joint project with the Canada Department of Manpower and Immigration who will produce the main dictionary in which some 8,000 occupations are covered, while DBS is producing a manual for coding census data. It is the first time that a classification serving both statistical and job placement purposes has been available. Development work also proceeded on revisions to the classifications for commodities and geographical areas with most of the intensive work being completed in the past year. Manuals for these classifications will be published in the coming year.

Company-Establishment Integration Section is concerned with the relationship between financial statistics pertaining to companies as such, and production statistics pertaining to the operating units (establishments) of companies. In addition, both sets of data have to be used alongside other economic and market statistics. The Section works with other divisions in the Bureau to find ways of extending the usefulness of these statistical relationships for analytical purposes.

To facilitate integration, changes in accounting and reporting procedures have been developed, and some of the Bureau's survey questionnaires are being revised. In the case of small companies it appears that income tax returns and associated documents can usefully supplement or replace surveys. Attention is now being focussed on methods of integrating the data from the more complex large companies that span two or more industries.

The foregoing research relates chiefly to identifying and dealing with integration problems at the data-collecting level. In recent months the Section has also been moving into the area of integration of data aggregates. This parallel line of research seeks to identify problems of relating company- and establishment-based data that enters into the various aggregations used for analytical purposes.

The staff of this Section has also been heavily involved in the work of other divisions as it relates to company-establishment integration. The Canadian Institute of Chartered Accountants has been particularly active in integration-related work, and has conducted several projects in which this Section has participated.

The Central Registers Section administers and develops the DBS Central List of Companies and Establishments, which provides the basic vehicle for standardizing the

classification of companies and their sub-units into standard reporting units for individual DBS surveys. This work area is covered under two main headings, "Maintenance and Development" and "Central List Extension".

Maintenance and Development - During the year the Central List coverage was extended to include all levels of government and some other small sectors not already included to accommodate certain needs of DBS surveys. This, together with natural survey growth, increased the total number of records to approximately 255,000. Copies of the Central List, in whole or in part, were provided to federal and provincial government departments and agencies, as well as to some businesses in the private sector. Large individual businesses as well as business associations continued to examine the Central List as a possible source for a standard "vendor code" system.

Investigation and resolution of differences in establishment definitions between survey lists and the Central List continued, resulting in over 400 modifications in company-establishment identities on the Central List. In addition, regular maintenance of the file required 46,500 additions, 15,000 deletions and over 58,000 other revisions of existing records.

A major effort during the year was the revision and updating of the Standard Geographical Classification Codes and the application of the 1970 Standard Industrial Classification Codes to all records. Both the 1960 and 1970 revisions of the Standard Industrial Classification will be carried on the file until such time as all DBS surveys are established on the 1970 base.

Central List Extension - In parallel with the extension of the Central List to cover all businesses in Canada, was the requirement for a list of all employers to enable classification of the members of the labour force by industry and point of employment in the 1971 Census of Population. By year-end, this list was completed, comprising some 550,000 business names, each of which had been coded in line with the 1970 Standard Industrial Classification and the current Standard Geographical Classification. Preparation of this list has partially accomplished the first phase of extending the Central List to cover all businesses.

Basic work was completed to allow the inclusion of all incorporated businesses, irrespective of size or activity, into the Central List file. Basic information including names and addresses was microfilmed from the cover sheet of Corporation Taxation Returns for the complete year 1969 plus new returns for 1970. At year-end, co-operative

arrangements with Department of National Revenue - Taxation were being finalized for keypunching this information to allow computer match/merge into the Central List file.

The Interdepartmental Working Committee with continuing representation from DBS and Department of National Revenue - Taxation continued investigation into the development of a Common Employer Numbering System applicable to all businesses in Canada.

Effective January 1, 1972, the revenue control function of the Unemployment Insurance Commission is to be transferred to the Department of National Revenue. At that time, Central Registers Section will assume responsibility for continuing maintenance of the sample frame used for the Monthly Employment Survey of small employers. Input for continuous updating of the frame as well as source material for our semi-annual publication "New Manufacturing Establishments in Canada" will be coming from DNR rather than UIC as at present. During the year extensive negotiations were conducted with the Department of National Revenue - Taxation to ensure that with the transfer of the revenue control function to that department there would be no available break in continuity of maintenance of DBS records.

Central Planning Staff

As noted in the previous report, a planning function was formally established in 1969 and a small staff assembled to work under the general direction of the Assistant Dominion Statistician (Integration and Development). The first phase of the staff's activities involved extensive study and discussion with a broad cross-section of Bureau managers of possible approaches to the planning problems faced by a centralized statistical agency. By the latter part of 1970, it had become clear that, while a comprehensive planning system covering subject-matter, methodology, research, integration, automation, production, marketing, finance, personnel and other elements should be the long-term goal, the development and implementation of the system on a step by step basis would minimize the problems of adaptation while at the same time yielding immediate and cumulative benefits.

The cornerstone of this gradual approach is the subject-matter itself and new procedures for the generation and systematic assessment of project proposals are currently under development. Much of this initial work is being done in the context of the departmental programme forecast for which the staff now has responsibility, but it is hoped to

integrate the procedures with the operational work of the Bureau on a year-round basis. Towards the end of the year, the staff assisted in the preparation of a paper on the Planning and Co-ordination of Statistical Programmes in a Central Statistical Office to be presented before the International Statistical Institute in Washington, D.C. in August 1971.

Consultant on Demographic Research

During the 1970-71 fiscal year the major portion of the time of the Consultant on Demographic Research was devoted to the provision of inputs to two substantial federal government projects and to Statistics Canada subject-matter areas. The first included the development of new methodology in regional population projections for Canada in that the migration component of population change was derived from projections of the level and industrial composition of labour demand in each metropolitan area. The second project was an attempt to provide a systematic information base for government policy in the field of population size and composition.

The Consultant also represented the Dominion Bureau of Statistics on an interdepartmental Committee on Demographic Objectives, where he presented papers reviewing the network of interconnections among a wide range of factors determining major aspects of the size, distribution and composition of population, and comparing the assumptions and results of a number of recent projections.

The Consultant chaired and directed work for the 1971 Census Research Sub-Committee, which is in charge of overseeing the development of a suitable data base to conduct research on the 1971 Census output. In this connection, he and his staff executed a major operation over several months, that involved the development of a classification system for referencing tabulations and their contents, and the application of the system to the listing and classification of tabulation units, variables, geographic legends, etc. in the tabulations of all previous censuses of Canada. In connection with the 1971 Census research activities, the subject-matter areas requiring research activity were outlined in several meetings of the Research Sub-Committee and over 600 tabulations specifications were turned in for his analysis, integration and synthesis in connection with such research projects (to supplement tabulations not already covered by the regular subject-matter sub-committees).

The Consultant also chaired a number of other committees including: the interdivisional Technical Committee on Population

Projections, the interdivisional Committee for Research on Vital Statistics, and the Census Division Standing Research Committee.

The Consultant has also served as Acting Assistant Director in charge of the Research Sub-Division of the Census Division. The Research Sub-Division conducts research on population patterns and trends and is in charge of producing population estimates and projections. In addition to these managerial duties he made a number of inputs to discussions and activities concerning division-wide problems. The Consultant also provided consultation on various demographic matters to several government and private agencies including the Economic Council, CMHC, Privy Council and Universities.

Econometric Research Staff

The Econometric Research Staff conducts research and provides consultative services to various DBS subject-matter divisions on the application of econometric and related techniques to the production, analysis and improvement of DBS data. In addition, it works in close co-operation with some of the research groups in other government departments.

During the 1970-71 fiscal year, continued emphasis was placed on the use of econometric and related techniques to improve the timeliness and the quality of various series produced by the DBS. Staff members developed equations for generating earlier quarterly and monthly estimates of some of the components of the National Accounts, and collaborated with the National Income and Expenditure Division in making the historical revisions of the National Accounts.

The staff actively participated in the development of an econometric model for the medium-term analysis of the Canadian economy, in particular, the investment, wages and prices sectors of the model.

A study entitled, *Married Female Labour Force Participation: A Micro Study*, was published by DBS. Another study, the Development of Methods for Estimating and Updating the Coefficients of Input-Output Tables, was documented and included in the Working Paper Series of the Econometric Research Staff.

First drafts of two other studies: Determinants of Hospital Costs in Ontario and An Evaluation of DBS' Capital Stock Estimates for Manufacturing, are being prepared. Satisfactory progress was also made on five other projects: Determinants of the Participation Rate of Married Women in the Canadian Labour Force, Analysis of Industrial Structures, Economics of Education, A Study of

Industry Selling Price Indices and An Assessment of the Usefulness of "Hedonic" Price Indices in the Development of Construction Price Indices.

In co-operation with the Staff Development and Training Section, a one-semester course on Econometrics was given to members of the DBS professional staff.

Regional and Manpower Research Staff

The work of the Regional Research Section on development of estimates of socio-economic data for sub-provincial areas continued to receive the main emphasis during the year. In anticipation of the availability of 1971 Census data for evaluation of estimation techniques, emphasis was given to automating the techniques so that evaluation and, where warranted, subsequent production would be subject to minimal delays.

In addition, the Regional Staff participated in undertaking statistical development projects such as those in close co-operation with provincial agencies and other DBS Divisions.

The Regional Staff continued to provide special data services to the various federal agencies having and interest in regional statistics and participated in statistical developmental work in consultation with other Bureau Divisions.

The Special Manpower Studies Section has maintained its traditional programme but with a new emphasis on the use of current data obtained from the Labour Force Survey and of Labour Force Survey historical files. For example, a new approach to the measurement of primary and secondary labour force participation is being tested from the January survey: two recent studies to be published in the forthcoming Labour Review examine trends in youth participation rates and in educational composition of the Labour Force.

Considerable time has been expended on exploration of methodology and feasibility of developing data series on employment by occupation in close liaison with Sampling and Survey Research and the Job Vacancy staff, as a result of which a pilot survey will be undertaken in June 1971. Other staff activities include the examination and analysis of job vacancy data, liaison with the Department of Manpower and Immigration and the Economic Council of Canada on particular research topics; close co-operation with DBS Labour Division with regard to planning the use of the Labour Force Survey to obtain additional information and special investigations such as paid worker reconciliation.

METHODOLOGY AND SYSTEMS BRANCH

During the year this new branch has been created comprising the Sampling and Survey Research Staff, the Computer Systems Development Division and the Electronic Data Processing Training Staff. The new branch thus combines the major disciplines, except subject-matter, involved in the development of survey and census designs and their automation, thus permitting a better integration of their activities. The responsibility of the branch is to work on the methodology of DBS surveys, design new surveys or redesign existing ones and participate in their implementation; and to design, develop and implement the required computer programmes. The objective of such work is to achieve, through the application of sampling, improved survey methods and automation, one or more of the following: increase the reliability of statistics; improve their timeliness; reduce the cost of compiling them; facilitate the extensive utilization of the collected data in individual surveys by establishing easily retrievable machine-readable data bases; and develop the necessary software to facilitate the creation of broad, integrated data bases.

Within the branch headquarters, the Electronic Data Processing Training Staff is charged with the development of a Bureau-wide EDP training programme aimed at both professional computer systems and subject-matter and clerical personnel. A broad range of courses have been developed including introductory courses, several courses in programming languages, systems analysis, specialized and advanced programming techniques. The development has begun on several courses which will be used to train subject-matter and clerical staff in the use of generalized programmes (utilities).

Sampling and Survey Research Staff

This staff has functional responsibility for the design or redesign of the methodology of surveys and censuses. Most of the work of the staff can, therefore, be grouped around projects of the different subject-matter divisions.

Census Division Projects - The basic design and estimation work for the 1971 Census was completed in the previous year. During the 1970-71 year the staff has been engaged in designing and developing three major evaluation projects and another major project which is oriented towards the 1976-81 Censuses. In addition to these projects, the staff has been developing several smaller evaluation projects and several plans for controlling the quality of the 1971 Census.

(Last year's Annual Report described the objectives, design, etc. of the evaluation projects mentioned below.)

- (1) Post-Census Agriculture Survey - During the past year work has progressed on this project to the extent that the maps to be used by the enumerators have all been sent out, all the manuals and training guides were nearly completed, and most of the specifications were submitted for systems analysis.
- (2) Reverse Record Check - During the last fiscal year developmental work on this project continued on schedule. All specifications for computer systems have been given to the Systems Analysts. Early phases have gone to systems analysis and programming. All the training manuals and training guides have been written as well as the clerical instructions. A dual control system will be implemented for this project and it will utilize clerical and computer methods, and all necessary control sheets, etc. have been designed. The major matching with the 1971 Census questionnaires will be done in the regional offices immediately after enumeration; tracing and follow-up will continue until approximately September 1972.
- (3) Response Variance - Progress on this project continued during the past year. The systems analysis is nearly completed. Arrangements have been made with Census Division for the supply of the necessary data in sufficient time to carry out the response variance calculations and produce estimates of response errors for publication with the other census data.
- (4) Address Register - In a sample of areas a register of addresses is maintained using administrative and Post Office information for update purposes. This register will be compared with the 1971 Census to assess the feasibility of maintaining a national register of addresses in urban areas. The required systems analysis and programming is under way.
- (5) Other Evaluation Projects - In addition to the above projects the staff are involved with somewhere between 20 and 30 evaluation projects, assisting in developing the methodology and the schedule of activities.

- (6) Quality Control Plans - During the past year plans were developed for controlling the quality of the printing of the census questionnaires, the stuffing of the questionnaires into envelopes, the logistics of shipping out material to the regions, and in addition to these, quality control plans have been designed to control the work done by enumerators in the field, and by coders in the regional offices. We are presently engaged in developing quality control plans for the microfilming of the census questionnaires and, to the extent possible, of Film Optical Sensing Device for Input to Computers (FOSDIC). At the same time the specifications for DIARY I were written and the analysis was completed as well as the programming. One of the primary functions of DIARY I will be to assist in the control of the microfilming and the FOSDIC reading and, hence, its success is essential. Specifications for DIARY II of the census have also been submitted but the programmes have not as yet been written. The output from DIARY II is a record of changes, imputations, etc. occasioned by the computer editing and correction of all missing and inconsistent data and will be of little use in controlling the quality of the 1971 Census, but information from DIARY II should help pinpoint problem areas that can be improved for 1976.

- (7) Work Measurement Study - The purpose of this study is to obtain estimates of time and cost of the various operations associated with data collection. Because of operational and budget constraints only 33 timers will be sent out to 33 selected Commissioner districts (located in groups of three) to time the enumerators' work in six different types of enumeration areas. The sample design and estimation methods have been established.

Labour Division Projects

- (1) The Labour Force Survey - The work in this area falls into two parts. One deals with maintenance and the other with methodological aspects of the survey.

- (a) Maintenance - There are several studies which provide basis for the measurement of the quality of the Labour Force Surveys.

- (i) Non-Interview Rates - These rates are calculated and presented monthly in the

form of graphs for Canada and for eight regional offices. The rates are given for each of the components of non-interview such as temporarily absent, no one at home, refusal and other, and by total in interview by month and year. A high non-interview rate may introduce bias in the estimates.

- (ii) Binomial Factors - These compare the sampling variability (variance) of estimates obtained from the Labour Force Survey with what would have been obtained from a completely random sample of the same size. The examination of binomial factors provide an over-all assessment of the performance of the survey design. Graphs of 12-month moving averages have been plotted and presented for two major characteristics (employed, unemployed) for self-representing units, non-self-representing units, and combined within each major region for Surveys 206 (August 1967) to 246 (December 1970).

- (iii) Slippage - Rates are calculated and presented monthly in the form of graphs for Canada by age and sex, and for ten provinces by total slippage. A high level of slippage results from incomplete coverage. In this case a bias results and sampling variability is increased. As with non-response, the former is unknown whereas the latter can be found. Slippage levels are also affected by errors in the population projections. The accuracy of the population projections is not known at present and will remain unknown until after the 1971 Census.

(b) Methodology

- (i) Variance-Covariance Analysis - Tables are prepared of standard deviations for 40 monthly estimates and for monthly and annual changes. They are used to differentiate changes in the estimates which reflect real

changes in the population from those which reflect apparent changes due to sampling error only.

- (ii) Telephone Study - Designed to determine the effect of telephone interviewing on the quality of the Labour Force Survey data, on the non-response rate, and on the cost of collection. The study is being carried out in the Toronto and Vancouver metropolitan areas from March to October (excluding May) 1971. Depending upon the results, a decision will be made as to the feasibility of introducing telephone interviewing in all self-representing units in all households willing to be interviewed through the telephone.

- (iii) Redesign of Labour Force Survey - Flow charts have been prepared to outline steps and activities essential in the redesign. The cost and variance function is being developed. Work has started on establishing the magnitude of changes in the boundaries of the Self-Representing Units between 1961 and 1971 Censuses. This work is necessary for making decisions on the extent of the redesign to be carried out.

- (2) Employment and Payrolls Survey (ES-1) - The revised version of this survey, referred to in last year's report, became operational at the end of 1970-71 and is now providing the official ES-1 statistics. Some technical difficulties remain to be ironed out of the part of the system that makes imputations for non-respondents and "corrects" data rejected by computer editing procedures.

- (3) Employment Survey - Small Establishments (ES-2) - The revision of this survey to collect the data as a supplement to the Job Vacancy Survey was completed during 1970-71. The possibility of some biases in the old ES-2 is being investigated.

- (4) Job Vacancy Survey - A major revision of the computer system that prepares the JVS estimates was shown to be necessary as more experience with the

data was gained. The revision was completed during 1970-71, the survey is now working and regular publication will begin in 1971-72.

The JVS system and field capacity were utilized for the collection and processing of data on training in industry and summer student employment and proved to be very efficient for these purposes. The staff was responsible for survey design and systems specifications in these surveys.

- (5) Occupational Employment Survey - The staff has designed a survey which utilizes the Job Vacancy Survey frame linked to the ES-1 (see above) frame as a means of selecting an efficient sample of the latter units for the purpose of reporting employment by occupation in an interview survey. Efficient, in this context, means that the sample is controlled, so that in a high proportion of the sample the sampled unit is at the same location as an interview-sample JVS unit. This means that the occupational data can be collected at a fraction of the cost that would be incurred had an independent sample been collected. This design represents a technical innovation of some importance for future business surveys. A small pilot survey was successfully completed in 1970-71. A much bigger one is being undertaken in 1971-72.

Manufacturing and Primary Industries Division - The staff has completed initial specifications for edit and imputation modules for a revised Census of Manufacturers System. During 1971-72 it is anticipated that these initial specifications will be translated into detailed systems specifications in preparation for analysis and programming.

Transportation and Public Utilities Division - The pilot survey of Origin and Destination of For-Hire Truck Traffic, by commodity, referred to in the last report, was completed. The decision, made on the basis of the results of this survey, to launch a major survey in 1971-72 has involved the staff in extensive design, planning, and implementation of this survey.

Central Classification and Company-Establishment Integration - During 1970-71 the Sampling and Survey Research Staff carried the main responsibility for the systems design of the project to extend the coverage of the Central Register of business units (to include all business units having at least one employee) and to automate the operation of this register.

The work carried out can be divided into three main categories:

- (1) Central List Maintenance - The actual maintenance of the Central List is the responsibility of a separate operation but certain support work has been carried out by the Extended Central List (ECL) implementation team. This includes the addition of the 1970 Standard Industrial Classification (SIC) code to all Central List records, modification extension and correction of the Standard Geographic Code (SGC) on Central List (CL) records and various record selection and format conversion operations necessary to the ongoing work of the CL. The ECL implementation team has also provided an ongoing consultation service to ensure that innovations in the CL operations are compatible with the ECL system.
- (2) Experimental and Developmental Work - The major portion of this work has been concerned with the development of a record linkage package designed to establish correspondence of identity between pairs of records on the basis of identifying information such as name and address. Some advanced computer systems and statistical methodologies are in the course of implementation and various experimental packages have been used for production work in other areas of DBS operations. Subsequent versions of these record matching procedures have been used to detect and demonstrate duplications in various survey lists within the Bureau. In the course of developing the record linkage package for the ECL certain modules of a computer programme of more general application (for example, efficient and somewhat special purpose sorting procedures) will be prepared and documented for more general use. It has been necessary to develop complex systems of cross-referenced indices of the various numbering systems under which business entities are identified within government departments. Work is in hand on the systems analysis and programming of such systems which will be available in the latter part of 1971 and will become routinely useful procedures for bringing other lists into correspondence with the ECL.
- (3) ECL Implementation - A 'skeletal' version of the ECL system was being programmed at the end of the fiscal year and is scheduled to come into operation by the end of July 1971. Concurrent with this work is the de-

velopment of more sophisticated versions of various steps in the ECL system including record linkage and the more sophisticated structured file maintenance and checking operations necessary to the ECL, and various interrogation facilities. These and other modules will be phased into the skeletal system as they are proven.

Merchandising Division Projects

- (1) New Retail Trade Survey - The first mail-out of questionnaires for this survey under the new design took place in January 1971. Several months of operation are required before all of the technical and operational difficulties are ironed out. However, it is expected that the system will prove itself in the production of data in parallel with the old one for the twelve months of 1971, will be adopted at the end of that period as the official one, and the old system will be discontinued.
- (2) 1971 Census of Merchandising and Services - Together with members of the Computer Systems Development Division this staff has been heavily involved with analysis of the requirements of, and planning for, this census. While the coverage and, hopefully, the quality of this census should be considerably improved by extensive prelisting of merchandising and service outlets it is also true that both the technical and operational difficulties have been greatly increased. Completion of the census, in the scheduled period will require technical and managerial application and skill of a very high order.

Prices Division Projects - Work has proceeded on the automation of the Industrial Selling Price Index but at a slower pace than was hoped for or anticipated. The role of this staff in this project has been mainly that of a consultant throughout this year, the main responsibility resting now with Computer Systems Development Division.

This staff has begun an investigation of the possibility of putting the ISPI sample onto a probability basis and is preparing to undertake a pilot survey along these lines. In addition we have written more exact statements of the various adjustment and analytic techniques used in the ISPI than have been available hitherto.

Data Processing Operations Division - Quality Control of Key punch and Key Edit - There are now 6 major keypunching projects

in this division which are sample verified using one or more quality control plans. Since several of these projects use both keypunching and key editing it was necessary to come up with more than one plan for a particular project. In addition, it was found that because of the variability in operators' punching or key editing error rates, it was worthwhile devising several plans so that the most suitable one could be used for a particular operator and thus reduce the over-all verification rate still further. Work on developing a system of quality control for string punching or string keying is continuing. At the same time, considerable effort has been spent on investigating a means of applying quality control to the data conversion process of the Census of Agriculture. Work has just begun on the development of quality control plans for keying the following surveys: Retail Trade, Census of Merchandising and Census of Agriculture. In addition, quality control plans have yet to be developed for three more surveys.

Education Division - This staff has just started working in the Education Division during the last four or five months of the past fiscal year. Since that time the staff has become involved in several surveys. These include Handicraft Survey, Drama Survey, Elementary and Secondary School Teachers Salary Survey, Transportation Survey and Library Surveys. In the case of the Library Surveys, the staff have begun work on an integrated system of surveys covering libraries. In addition, the staff is also co-operating with the Computer Systems Development and Education Divisions to develop an over-all integrated information system on education.

"Ad Hoc" Surveys - During the period 1970-71 the staff has been carrying out a number of surveys for various government departments on a cost recoverable basis:

- (1) Nutrition Canada - This is a national survey conducted by the Food and Drug Directorate of the Department of National Health and Welfare, with the co-operation of the ten provincial health departments. The Bureau has been heavily involved in this survey. The Methodology of Field Surveys and Consultation Staff has designed the whole survey system, while the Field Division has been given responsibility for some field operations.

The survey has been designed to provide basic information on the nutritional well-being of Canadians in order to assist in the planning of public health programmes. It will determine the type and quantities of foods normally ingested by Canadians in groups characterized by geographical

location, income level, age and sex. From this information the dietary intakes of nutrients, non-nutrient substances, food additives and pesticide residue will be ascertained and the nutritional status of the groups evaluated by clinical examination, anthropometric measurements and biochemical analysis. The survey has been in the field since October 1970 and it involves 21,000 persons selected from the five regions, namely: Atlantic, Quebec, Ontario, Prairies, and Pacific.

The field operations of the survey are expected to be completed by September 1972.

- (2) Canadian Travel Survey - The major survey of domestic travel by Canadian residents planned for the calendar year 1970 on a joint federal-provincial cost-sharing basis was cancelled due to the withdrawal of some provinces for budgetary reasons. The survey was rescheduled for 1971 on a reduced scale under federal sponsorship. Most provinces have opted to participate by working out special arrangements with the federal sponsor, the Office of Tourism, Industry Trade and Commerce Department, i.e., paying for the collection of additional data in their province. DBS is carrying out this major survey for the Office of Tourism with the Travel Survey Section of Methodology of Field Surveys and Consultation Staff providing design, methodology and management. It is an independent household survey of some 12,800 households in all provinces and territories with four personal interviews being carried out at roughly quarterly intervals.

The interviewing will be completed in January 1972 and the results will be made available some time later in that year.

- (3) International Travel - The staff has been working, in co-operation with the Balance of Payments Division, on a thorough review of the collection of data on International Travel. The collection of these statistics involved both Immigration and Customs departments. Recent changes in the organization of these departments as well as an increased demand for more reliable and comprehensive statistics in this field have combined to create an urgent need for developing new methodology, including sampling techniques at border points as well as air and sea ports.

- (4) Other Surveys - A number of somewhat smaller surveys have been carried out in the year 1970-71 for the following government departments: National Defence, Secretary of State, and Communication. In all these cases, the staff have been responsible for survey design, for some of the operational aspects as well as for assisting in analysing the survey result. All these surveys have been conducted on the cost recoverable basis.

Consultation - Substantial resources of the staff have been involved in providing consulting services within the Bureau and for other government departments. The range and the scope of this service vary a great deal and the demand has been continuously increasing. It is not restricted only to the design of household surveys but it also extends to the general field of mathematical statistics.

General Survey Systems - The development of the Geographically Referenced Data Storage and Retrieval System (GRDSR) or as popularly referred to as the Geocoding System, has been continued and the first operational version of the GRDSR System is tested and operational now. The initial application of the GRDSR System is to provide tabulations by arbitrarily defined areas for any combination of census characteristics quickly and inexpensively. The arbitrarily designated areas in the fourteen largest metropolitan centres will be approximated by selecting all of the block-faces which fall within the designated boundaries. In the rest of the country, arbitrarily specified query areas will be approximated by selecting all the enumeration areas which fall within the delineated boundaries. All major elements of the GRDSR System have been tested out using the 1969 Test Census data and procedures. Location co-ordinates have been assigned to all addresses; the location coded addresses have been linked back to the census data; the location coded census data have been stored in a suitable format on a randomly accessible device; retrievals from the geocoded census data by specified areas and specified combinations of census data characteristics have been produced by a suitable generalized retrieval and tabulation programme which can be used by persons not familiar with computer programming. Capability to display retrieval and tabulation results graphically (SYMAP) has also been developed and tested. Outside of the requirements of the census application the GRDSR System is flexible enough to permit any user having a machine-readable data file with addresses, to assign the appropriate geographic location co-ordinate to the addresses, for subsequent retrieval from such a file by

Survey arbitrarily delineated query areas. This kind of system flexibility has been tested and demonstrated, and parts of the system have been turned over already to provincial and a municipal government to be used with their local data files.

In recognition of the fact that various DBS data processing applications for different surveys are similar, a number of generalized programmes have been created to perform functionally recurring data processing applications. These generalized programmes permit the specifications of the data processing operation requirements in a problem-oriented language, which can be successfully learned and used by persons with minimum computer programming knowledge. The various generalized programmes are tools to DBS Staff, which permit them to implement surveys, pilot studies and research work rapidly and inexpensively. These generalized programmes have also the potential to process effectively small and medium-sized surveys on a regular production basis. The generalized programmes described above, which are tested and operational are as follows: Editing and Imputation programme; Data Storage and Retrieval programme; File Linkage programme; Postal Address Analyser System.

Computer Systems Development Division

During the year there were two organizational changes made which affected this division. In the first half of the year CSDD was part of the Operations and Systems Development Branch and in the second half it became a part of the Methodology and Systems Branch.

Shortly after the new branch was formed, the division was reorganized. The new organization orients the division towards the subject-matter programmes of the Bureau, establishing four systems development and programming subdivisions each servicing the requirements, respectively, of the Economic Statistics Branch, Socio-Economic Statistics Branch, other branches and the censuses of population, housing and agriculture.

Programme Maintenance and Quality Control was moved from Data Processing Services Division, and Analysis and Programming Standards was moved from the former OSD Branch Headquarters Staff to CSDD.

The tempo of programming for the 1971 Census was stepped up during the year and at year's end was considered to be on schedule. More programming was done by contracting in 1970-71 than in any previous year.

ECONOMIC ACCOUNTS BRANCH

This Branch, in its general responsibilities, is concerned with a wide range of economic statistics which include the principal comprehensive statements and indicators relating to the Canadian economy. The statistical programme constitutes the major portion of what is referred to as the System of National Accounts. Organizationally speaking, the Divisions of the Branch, namely the Balance of Payments and Financial Flows Division, the National Income and Expenditure Division and the National Output and Productivity Division reflect the contribution of the Branch to the integrated System of National Accounts. Also included in the Branch is the General Time Series Staff which have assumed a bureau-wide function in the development and operation of a computer-oriented system of storage, retrieval and dissemination of data. Thus the scope of the Branch activities extends over the whole ambit of the organized output of Statistics Canada and beyond, providing a set of macro-economic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

Balance of Payments and Financial Flows Division

The Balance of Payments and Financial Flows Division is responsible for the construction, analysis and publication of statistics and reports related to four important areas of the economy. The first of these involves estimates of balance of payments covering current and capital transactions between Canada and other countries. The second covers Canada's international investment position measuring the country's external assets and liabilities. The third of these areas, the financial flow accounts, is designed to integrate the many financial activities of the Canadian economy into a single statistical framework and to record the flow of funds between the various sectors of the economy. The Division is also concerned with the publication of statistics on international travel covering both Canadians travelling abroad and non-resident visitors to Canada.

The publication programme of the Division included the quarterly reports on the balance of payments and the financial flow accounts, monthly reports on sales and purchases of securities between Canada and other countries and monthly and annual reports covering travel between Canada and other countries. The principal series of international investment and foreign ownership and control

of Canadian industry were published as they became available in the regular quarterly reports of the balance of payments.

During the year the Balance of Payments Section devoted resources to the preparation of reports giving annual data on Canada's international investment position and balance of payments. These reports will include information additional to that contained in the quarterly reports; at the close of the year work on these reports was nearing completion. A special survey covering business service payments and receipts between Canada and all other countries in 1969 was undertaken during the year and the results will be included in the Balance of Payments report noted above.

The staff continued to provide technical assistance and advice during the year on statistical aspects of Development Assistance and to the Working Group on Foreign Ownership.

The International Travel Section made considerable headway over the previous year in advancing the release date of its annual report. The report covering 1969 was released in October and in time for the Dominion-Provincial Conference on Tourism at which the Section presented some statistical highlights of international travel. An advance summary of quarterly travel payments and receipts and numbers of travellers was released in the *DBS Daily* for the fourth quarter of the year, gaining two weeks in timeliness. It is planned to continue this practice in 1971.

As a result of the work of a Bureau Task Force charged with examining methods and recommending improvements in the area of international travel, a pilot sample survey to improve the statistics on the number of international travellers at Canada-United States border crossing points was undertaken towards the end of the year. The results of this project will be available shortly and, if successful, the system will be extended to other border points, providing both better statistics and facilitating the flow of traffic.

During the year, in addition to the regular publication programme, the Financial Flows Section continued to work on methods to improve the timeliness of the release of data. Planning was also undertaken regarding both the automation of processing financial flows statistics and the preparation of seasonally adjusted estimates. None of this work has yet reached a sufficiently advanced stage to influence the publications of the Section.

National Income and Expenditure Division

The Division is responsible for the preparation and publication of the quarterly, annual and historical National Income and Expenditure Accounts including National Income, Gross National Product and Gross National Expenditure aggregates. The Division is also involved in research, developmental and analytical activities related to its subject-matter.

In 1969, the Division had published, in a summary format, the results of an historical revision of annual aggregates for the years 1926 to 1968. The purpose of these new accounts was the incorporation of major statistical revisions made possible by the availability of 1961 Census data as well as the introduction of changes in definitions and structural presentation largely to bring the accounts in a closer relationship to accepted international standards as represented by the United Nations System of National Accounts.

During 1970, the detailed historical series 1926-1968 were updated to include firmer annual data for 1967 and 1968 and were made available on request in computer print-out formats. The Division also revised the quarterly series from 1947 to 1968 to place them on a comparable conceptual and statistical basis with the historical annual series.

Improved timeliness achieved by the efforts of various divisions of the Bureau supplying monthly and quarterly basic data to the National Income and Expenditure Division coupled with increased efficiency as well as automation of several phases of the preparation of the quarterly accounts have resulted in their publication within some 55 days after the reference period, a gain of several weeks over previous timeliness performance. This occurred in spite of largely increased requirements for accuracy even in aggregates published on a preliminary basis.

National Output and Productivity Division

The National Output and Productivity Division regularly publishes indexes of Real Domestic Product for the economy as a whole, its major industry components such as the Index of Industrial Production, and a large number of individual industries. In July 1970, monthly indexes of Real Domestic Product were introduced to the public for the first time for agriculture, forestry, fishing and trapping, construction, transportation, storage and communication, trade, finance, insurance and real estate, community, busi-

ness and personal services, and public administration and defence, along with some industry detail within these groups. These measures had previously been published on a quarterly basis. Thus, including the industry detail available for the monthly Index of Industrial Production, over 120 component series are now available on a monthly basis. The release of the monthly data constituted the culmination of a major data development project in the National Output and Productivity Division which had extended over nearly a decade.

Revisions covering the 1961-70 period were also completed and published by the Industrial Output Section in February 1971. The main features of the revisions were the adoption of 1961 weights based on the final gross domestic product at factor cost distribution, the incorporation into the system of the latest annual or quinquennial census information, up-to-date annual levels, extension of the total activity concept to manufacturing, mining and forestry, and some further improvements of the monthly indicators. This latest release completes the extensive revision and updating programme of the RDP system which commenced with the revisions of the monthly Index of Industrial Production in 1966.

During the year the Industrial Output Section continued to publish current dollar value added on an annual basis for the goods-producing industries by province.

The National Output and Productivity Division revised its published annual aggregate productivity indexes during the year in order to incorporate the Real Domestic Product revisions noted above. The Productivity Research and Analysis Section of the Division uses the Real Domestic Product indexes along with labour input data to derive the annual productivity ratios it publishes for the commercial economy and selected industry components such as manufacturing, commercial services and commercial non-agriculture.

During the year a number of individual industry productivity studies reached an advanced stage of preparation. These studies including ones pertaining to sugar refining, cement manufacturing and petroleum refineries are patterned after earlier releases such as the one for Iron and Steel Mills.

In addition to the above regular publication programmes, the National Output and Productivity Division is engaged in a number of research and development programmes including pilot studies of output, input and productivity for selected components of the important and rapidly growing non-commercial

industries, the development of industry current dollar data, the development of quarterly productivity measures for the major industrial aggregates, and the development of annual and quarterly unit labour cost measures.

During the year the Division's officers continued to play a major role in the development and integration of industry-oriented statistics throughout DBS. Assistance was given to representatives of industry, federal and provincial governments, and visitors from foreign countries with respect to various aspects of Real Domestic Product and productivity statistics.

The Productivity Research and Analysis Section participated in the Second Session of the Working Group on Productivity Statistics of the Conference of European Statisticians during April 1970. The Chief of that Section also gave a talk on recent productivity and wage developments in Canada at the North American Conference on Labour Statistics in June 1970.

FINANCIAL STATISTICS BRANCH

The Divisions of the Financial Statistics Branch produce a wide range of financial statistics on business and governments, and important support series on capital expenditures, construction and housing.

The statistics produced by the Branch are becoming increasingly used to provide an understanding of the operations of the economy. Quarterly financial data are now available for all sectors of the economy and are meeting a demand for up-to-date information on the financing of the corporate and government sectors. The annual data received under the Corporation and Labour Unions Returns Act are throwing a great deal of light on foreign investment in Canadian business and on other aspects of corporate activity.

A prime concern at present is the analysis of the information now being collected to ensure its consistency and usefulness. Particular attention is being paid to problems of classifying companies and families of companies by industry, and to the definitions of the items on the balance sheet and income statement. One of the important objectives of this work is to make it possible to add together the information available on business and governments to arrive at comprehensive totals of financial claims. A second important objective is to provide a framework within which production and financial statistics can be integrated and analysed.

General Time Series Staff

The General Time Series Staff is concerned with three main activities: the continuing publication programme of the monthly Canadian Statistical Review and its various supplements; applied research and developmental work in seasonal adjustment and other smoothing techniques for time series analysis; and the development, implementation and management of CANSIM, the DBS computerized time series data bank.

During the past fiscal year the programmes in the first stage of CANSIM development were fully operational. The base grew rapidly to 26,000 series. For the most part, data originate in the Dominion Bureau of Statistics. A new data retrieval option was introduced which simplifies the use of series from CANSIM for analysis via computerized routines. Use of CANSIM within the government, and public sales of machine-readable data on magnetic tapes, are to be developed further. An enlarged and improved retrieval package is under development and should facilitate further use of the system.

Studies such as Input-Output which require the linking of financial and production statistics are thereby facilitated.

It is expected that one result of these investigations into company statistics will be a lightening of the load on respondents to DBS surveys through better use of available data. The Economic Statistics Branch and the Financial Statistics Branch are co-operating in this effort.

These and other areas of work are covered in detail below.

Business Finance Division

The statistical programme of the Business Finance Division centres around three related but widely diverse areas.

Statistics of investment intentions and related activities have been in existence the longest of these three areas. These statistics include capital and repair expenditures as reflected in business intentions as well as actual expenditures, residential housing starts and completions as well as value put-in-place, building permits, the construction industry and statistics on the stock of capital in the form of fixed assets.

The profits earned from and the financing of economic activity, the second area, has held considerable interest for economic analysts but has not been represented in the statistical programme to any significant degree until comparatively recently.

The third area has to do with scientific research and development, an activity that leads to economic and industrial advancement.

(1) Capital Investment - Annual surveys of capital and repair expenditures are being continued and provide national, regional and industry estimates of capital formation as well as repair expenditures made to the existing stock of fixed assets. Investment intentions are published by industry and by province in *Private and Public Investment Outlook* early each year to provide information on construction plans as well as intended expenditures on machinery and equipment. A second survey of spending intentions is carried out during the middle of the year and these revised intentions are published in *Private and Public Investment, Mid-Year Review*.

The quarterly survey of investment intentions and realizations of spending plans, initiated in 1968, is progressing favourably. The implementation of the quarterly sample was continued during 1970 and is now expected to be completed during 1971. Adjustments to the quarterly sample in future years will be directed towards providing improved representation in specific industries and geographical regions.

(2) Construction - In addition to the construction data provided in *Private and Public Investment in Canada*, which shows expenditures on new and repair construction as reported by organizations paying for the work done, another report *Construction in Canada* published in June of each year provides information on value of work put in place by type of structure, along with over-all estimates of the labour and material content of this work. This report also provides separate estimates for value of work performed by construction contractors and that portion performed by others engaged in construction work on their own account. Also included are estimates of the equivalent man-years necessary to carry out the annual programme of construction. Information on types of structure is derived from the capital expenditures survey mentioned earlier which also contain information on the labour and material content of own-account construction. The labour and material content of the contract portion is derived from the results of a sample survey of construction firms conducted annually. The detailed investigation of the construction industry started in 1967

is being continued. For the accounting period of 1967, the Construction Section initiated a Census of the Mechanical Contracting Industry. This census, covering six trades, is now conducted annually.

In the 1970 accounting period, a Census of the Electrical Contractors was initiated. Research and development was also started during 1970 on a third census group comprising of Highway, Road and Bridge Contractors. Pilot questionnaires are currently being tested in the field and a full-scale mailing is expected in June. Additional research was undertaken on development of an integrated computer system for processing, tabulating and editing of the Censuses of Mechanical and Electrical Contractors.

(3) Housing - Reports on building permits issued by municipalities in Canada are published monthly with an annual summary. These publications provide data on the number and value of housing units by type and the value of industrial, commercial, institutional and government building construction in more than 1,400 municipalities in Canada. A monthly report *New Residential Construction* contains the results of a nation-wide survey by the Central Mortgage and Housing Corporation, providing data on dwellings started, under construction and completed. These physical measures of housing construction activity are translated into values for the purpose of estimating quarterly and annual residential capital formation.

In addition to the production of current housing and building permit statistics, work was undertaken to improve the quality of building permits statistics provided during the past 15 years. Work in this area will culminate in an historical publication on building permits containing information not previously published: on metropolitan area, county, and economic region groupings. References will be made to population of areas covered and also to municipal annexations and changes in designations.

Developmental work was also carried out toward the extension of the estimates of gross and net capital formation in housing with a view to publishing them quarterly, along with other related housing series.

(4) Capital Stock - Developmental work has continued in the improvement and extension of the estimates of fixed capital flows and stocks. The basic publications in this series were released by the Dominion Bureau of Statistics in 1967. Efforts have continued with interested users of these data to develop a basic information file of punched cards and computer tapes.

(5) Research and Development - Regular surveys on scientific research and development, one of the federal government's activities and one of industry, are carried out. The objective of these surveys is to provide information on the resources (money and people) devoted to science in Canada. These surveys have been confined to the physical and life sciences, however there has been a growing interest in recent years in comparable information in the social sciences. During the year an experimental survey of the federal government's research activities in the social sciences was begun. This survey (and its "follow-ups") will test operational definitions and concepts before a regular survey programme is started.

(6) Financing - Surveys of the financing plans and structure of financial and non-financial corporations in Canada have been continued. The publication *Financial Institutions* provides information on the major financial intermediaries in Canada. Development work is continuing to provide data for the groups not available currently.

The Financial Institutions Section is continuing to provide financial data on the major financial intermediaries in Canada in the quarterly publication *Financial Institutions*, and the annual publication *Credit Unions*. Development work is continuing on groups not currently available such as real estate and investment-holding companies. Also, negotiations have been initiated to add the chartered banks and life insurance groups to the quarterly survey.

Development of quarterly financial statistics of industrial corporations including income and expenditures, profits, dividends and balance sheet information was continued.

During 1970 an historical series of financial statistics was produced for the years 1962 to 1969 for 25 industry groups in the industrial corporation sector. The statistics include complete balance sheets (assets, liabilities and shareholders' equity) income, expenditures and profits. Starting in the first quarter of 1971 the quarterly publication is being enlarged to include seasonally adjusted data, financial ratios and percentages.

Corporations and Labour Unions Returns Act Division

The Corporations and Labour Unions Returns Act Division is responsible for the compilation, analysis and publication of annual financial and taxation statistics of all corporations in Canada and for reporting financial and other information related to the

ownership and control of a group of larger corporations and to the affairs of labour unions carrying on activities in Canada, as required by the Corporations and Labour Unions Returns Act. This Act was passed by Parliament in 1962 and is administered by the Dominion Statistician under the authority of the Minister of Industry, Trade and Commerce. The purpose of the Act is to provide information on the extent and effects of foreign ownership and control of corporations in Canada and on the extent and effects of the association of Canadians with international labour unions.

The publications programme of the Division consists of one bi-annual and four annual publications. It also provides the Department of National Revenue with statistical information derived from the corporate income tax returns as well as primary data for other DBS series.

In comparison with 1969-70, when the publications programme of the Division was brought onto a more timely basis with the release of eleven reports, the 1970-71 fiscal year was largely one of consolidation. Efforts were directed to further improvements in the timeliness and quality of the Division's annual statistical reports and, in total, four reports were published during the year, all of which related to 1968 data.

As part of a programme of integration and quality improvements undertaken during this period in the area of corporation statistics, more extensive use was made of information collected by other DBS Divisions and outside agencies. This permitted the publication in 1968 CALURA reports of statistics on the research and development operations of foreign-controlled companies and the extension of the foreign ownership and control series for the 1969 report (which is now in progress) for several industries where a significant number of corporations are exempt under the Act. Other refinements, which it is hoped to incorporate in the 1969 and 1970 reports are designed to permit further integration with related statistical series as well as to cater to users' requests for more extended and detailed series. These improvements will include the publication of statistics on the taxation of foreign-owned companies and greater emphasis on statistics of foreign control as distinct from foreign ownership.

In the area of labour union statistics, the 1968 Annual Report presented for the first time the names of the principal officers of labour organizations, the names of Canadian representatives on international union executive boards, and the number of collective agreements held by each union carrying on activities in Canada. Arrangements were developed with the Canada Department of Labour to

use information submitted to them for a part of the CALURA 1970 report and thereby ease the reporting burden on labour unions.

The passage of the Corporations and Labour Unions Returns Act in 1962 created an additional requirement for the reporting of financial data by a substantial number of corporations in Canada and the necessity to duplicate, to a considerable extent, tabulation of corporation financial data being carried out by the Department of National Revenue. In order that this duplication might be avoided, an amendment was passed to the Corporations and Labour Unions Returns Act in 1965, relieving a corporation from the obligation of filing a financial statement under the Act if the corporation had filed a financial statement under the Income Tax Act. At the same time, access to corporation income tax returns was made available to the Dominion Statistician. A joint programme of corporation financial statistics was developed that provides the Department of National Revenue with statistical information on the taxation of corporate income and, at the same time, provides data for the purposes of the Corporations and Labour Unions Returns Act and for other statistical purposes.

The Corporations and Labour Unions Returns Act requires that the Dominion Statistician prepare an annual report for Parliament summarizing both the confidential and non-confidential information submitted by corporations and labour unions. The first report was tabled in July 1965, covering fiscal periods of corporations and labour unions ending in 1962. Subsequent annual reports under the Act are released in two parts - Part 1 relating to corporations and Part 2 to the labour unions.

The publication *Corporation Financial Statistics* was developed following the amendment to the Corporations and Labour Unions Returns Act. This publication is based on information contained in the accounting records of over 200,000 corporations and provides information on their operations, including income, expenditures and profits, and on their financial position, including details of assets, liabilities and equity, and a statement of retained earnings indicating the disposition of current earnings. A second publication, *Corporation Taxation Statistics*, deals with the taxation of corporation income. In addition to giving statistics on corporation earnings and taxation by industry, province and corporation size, this publication provides a detailed reconciliation of company book profit with taxable income. This reconciliation indicates the magnitude of the main provisions of the Income Tax Act as well as the magnitude of the main items of income and expenditure which are

treated differently in the Income Tax Act than in company books.

Another publication, *Inter-Corporate Ownership* makes available to the public non-confidential information required under the Corporations and Labour Unions Returns Act and indicates to some extent the magnitude of inter-corporate relationships in Canada. The latest issue of this bi-annual publication was released in February 1970 and related to 1967. In it, corporations commonly owned by another corporation or linked in ownership relationships were grouped together to form ownership complexes. These corporations were grouped when there existed inter-corporate ownership of voting rights of 10 per cent or more. A revised edition of this publication covering the year 1969 is currently being developed.

Governments Division

During 1970-71 the Governments Division continued to concentrate its resources on the improvement of the quality, the timeliness and the further development of its regular output.

During the year, an approach toward the reconciliation of the Financial Management series (which reports government revenues by source and expenditures by function) with the National Income and Expenditure series (which reports on an economic basis) was developed for incorporation into the respective Financial Management publications covering each of the federal, provincial and local levels of government. The publication on the federal government containing such a reconciliation was released in March 1971 - *Federal Government Finance* (1968-69). The next issue of the corresponding publication on the provincial government level will also contain the noted reconciliations. Moreover, like the federal government publication, the provincial issue will also contain a detailed cross-classification of revenues by source and type, and of expenditures by function and economic object.

The current federal-provincial fiscal arrangements, providing for equalization payments to the provinces, cover the fiscal years 1967-68 through to 1971-72. In 1970-71 the Governments Division completed, for the Department of Finance, its special analysis of provincial government 1968-69 revenues as required by the Regulations. Some difficulties were encountered in classifying certain oil and gas revenues but with the close co-operation of the provinces concerned, these were resolved and the formal compilation was submitted ahead of schedule.

During the year the Division participated in numerous meetings of subcommittees of the Federal-Provincial Continuing Committee on Fiscal and Economic matters. Three subcommittees were active during the year and the Division's input to these in terms of data, time and information was considerable. The work of these subcommittees will continue throughout the coming year and this, together with the Division's recently delegated responsibility for the co-ordination of all of the Bureau's inputs pursuant to the Fiscal Arrangements Regulations, will involve the Division very significantly.

While very substantial historical revisions to the government sector of the National Income and Expenditure statistical series were completed in 1969-70, further revisions were undertaken in 1970-71. The latter which incorporated changes in benchmarks, concepts and statistical universe were extended back to 1965. Similar revisions (back to 1962) were made in the government sector of the Financial Flows series.

In June 1970, the Governments Division convened the final (seventh) session of the Eighth Federal-Provincial Conference on Municipal Statistics. This session approved the new financial classification systems for municipalities. These systems are described in the publication *A Financial Information System for Municipalities* which was released by the Division in November 1970.

As of March 31, 1971, two of the provinces have implemented the essence of the asset, liability, revenue and the functional expenditure systems, and there are strong

indications that the other provinces will have implemented the same by April 1972.

In an effort to assist the provincial Departments of Municipal Affairs in the conversion to the new systems, the Governments Division engaged in several briefing sessions with provincial and municipal officials. Further similar sessions are planned for 1971-72.

In November 1970, the Governments Division convened, in Ottawa, a conference of users of public finance statistics. Provincial governments and several federal government departments and agencies were represented. The principal objective of the meeting was to isolate the major financial-statistics requirements of potential and actual users within government. The proceedings of this meeting have been summarized in one official report. The Conference was very beneficial to the Division and much of the development work now in progress is aimed at meeting more adequately the statistical requirements of prime users.

The Division's developmental work is progressing favourably in terms of available resources. The principal current considerations are: the thorough review of the government statistical universe at each of the three levels; the development of "sources and uses of funds" statements; the reconciliation of government year-end Financial-Management series balance sheets with the Financial Flows accounts; the development of a local government debenture debt data bank and the conversion to computers of some of the major data processing operations.

ECONOMIC STATISTICS BRANCH

As the name of the Branch implies the majority of its activities are concerned with the production of statistics related to the economy of the nation and designed to be of assistance in the formulation of policies and programmes that affect its condition and growth. The Branch directs the operations of six Divisions and an "Input-Output" Research and Development Staff. Branch activities are principally concerned with the collection, processing, analysis and publication of statistics derived from business establishments. These consist, in general, of production, sales and service "units" in contrast to the reporting universe of the Financial Statistics Branch which, so far as the private sector is concerned, deals with companies.

For the most part the collection of the information is carried out by means of hundreds of monthly, quarterly and annual "mail

type" surveys of varying sizes although a number of "enumeration type" surveys are also involved. In some instances administrative records form the source of data. The Branch tends to concentrate on production or sales of commodities and services, materials used, employment, prices, and imports and exports of commodities.

External Trade Division

The External Trade Division is responsible for the compilation, dissemination and analysis of statistics on Canada's foreign trade. The ongoing part of this programme involves the production of monthly, quarterly and annual reports and special tabulations which provide data on trade by commodity, by country, by province of customs clearance for

exports and imports, as well as by mode of transport, by region of lading for exports, and by tariff item by country for imports.

Of special interest during the year has been the Division's extensive involvement in the first stage of full automation of external trade data processing. This project, which is being conducted in conjunction with the Customs Branch of the Department of National Revenue, has a completion target of early 1975.

The first stage consists of the development of a series of data files recorded on magnetic tape which include, in addition to a wealth of historical and current detail on external trade transactions, a series of flexible retrieval and manipulative options. The object is to make available to researchers and policy-makers in the area of foreign trade virtually any conceivable type of tabulation on these data required for analysis. In line with DBS's programme of automation, the data files have been designed with a view to integration with other data systems in the Bureau. Further, they have been designed so that existing statistical and econometric computer programmes can readily access them and transform the data in any standard way. While outputs from this first stage of the system are only slated for later in 1971, progress to date has encouraged the Division in the belief that a new and powerful tool has been added to analytical instruments available for the study of international trade problems.

Since no data project is ever complete without the provision of suitable and consistent historical figures, considerable effort has been devoted to the retrieval and manipulation of back data (initially to 1967) to achieve consistency with current data - particularly from a commodity classification viewpoint. The existence of comparable back data should make it possible to conduct more detailed time series studies and structural comparisons of Canada's trading patterns.

For several years past the Division has accorded top priority to improving the timeliness of its major series and as a result Canada now ranks among the top five nations in the world in the speed with which international trade statistics are produced.

Regrettably during the year under review, as a result of the national postal strike and of technical difficulties in the computer area, the record timeliness performance of 1969-70 could not be matched. During the past year, however, significant progress was made towards eliminating the long standing backlog of basic annual publications and it is anticipated that this

catch-up programme will be completed by the end of 1971.

Contacts with the private sector were maintained and reinforced. The Division is now participating in regular meetings with some twenty-five industry associations. Much emphasis is being placed on the development of commodity classifications which better reflect new technological trends, product diversification, import substitution and export promotion opportunities. Concurrently the Division has expanded its programme of commodity studies which provide industry, on a cost-recovery basis, with detailed information on specific products entering into Canada's trade.

The Division continues to work closely with a number of major federal departments and agencies providing them with material necessary for them to fulfil their responsibilities for policy-planning and development. For example, External Trade Division is collaborating with the newly created Textile and Clothing Review Board in the analysis of imports and their impact upon domestic production, and the Trade Commissioner Service is being provided with greatly enhanced detail on the composition and direction of Canadian exports to the United States.

Another significant development in 1970-71 was the re-establishment of the Interdepartmental Advisory Committee on External Trade Statistics, comprising all major federal users of these statistics, which provides a forum for the discussion of users' data requirements.

Collaboration with the provincial governments has been further extended and agreement has been reached with the governments of Manitoba, New Brunswick and Saskatchewan to provide them with considerable detail concerning the provincial share of Canadian exports. Similar agreements had previously been negotiated with a number of other provinces. Meanwhile, some efforts are being directed toward the development of better detail on the interprovincial movement of goods prior to export.

During the year the Division has participated increasingly in the work of a number of international agencies and committees. Observers were present at meetings of the Customs Co-operation Council in Brussels under whose auspices the Brussels Tariff Nomenclature is produced. This organization is working towards the bringing together of tariff and commodity classifications. Meetings were also held with the British and American statistical agencies to discuss various aspects of electronic data processing systems for handling international trade

statistics. The Sub-Committee on Statistics (Canada-United States Automotive Agreement) held a number of meetings to achieve reconciliation of fundamental discrepancies in counterpart statistics. A satisfactory degree of reconciliation was achieved. Representatives of the Division and of the Department of National Revenue met with the US Department of Transportation to study the development of universal international trade documents, in the context of automated systems. Discussions were held with the US Bureau of the Census and Bureau of Labor Statistics concerning the methodology of international trade index number construction. More generally, consultations with the United Nations Statistical Office, the Secretariat of the General Agreement on Tariffs and Trade and the Organization for Economic Co-operation and Development were maintained and developed during 1970-71.

Among other interesting developments in the work of the Division the following are considered particularly noteworthy; the revision of the official indexes of export and import prices, with year 1968 as the new weighting and reference base, was completed. Unit value indexes for commodities traded with the United States and other special trade measures are being studied. A review of the inland freight component of exports and a study of the landed cost of imports are under way which will be of particular relevance to Balance of Payments adjustments. The Division has been providing an increasing amount of commentary on current trade trends for inclusion in the *DBS Daily* and elsewhere. The publication by this Division of seasonally adjusted trade data commenced in 1970. Increased detail was introduced for major trading countries and areas such as Japan and Latin America, and a concordance was developed which related the Canadian Customs Tariff to the Brussels Tariff Nomenclature, and subsequently to Canadian import data.

The increasing public awareness of the importance of Canada's international trade in terms of the economic well-being of the country has been demonstrated by an ever-growing demand for services provided by the Division. It is worthy of note that this demand has been met by improved utilization of existing manpower and other resources, with an actual drop in the number of man-years utilized.

Input-Output Research and Development Staff

During the fiscal year 1970-71, the Input-Output Research and Development Staff has made considerable progress both in the activities associated with the construction of input-output tables and those related to customer services and analysis.

The 1961 input-output tables have now been reconciled with the National Income and Expenditure Accounts and have been expanded in the area of final demand. Approximately 150 categories of final demand have been estimated: these include consumer expenditures by category of expenditure, government expenditures on health, education, defence, and other current expenditures by level of government, and capital expenditures on machinery and equipment and type of structure by purchasing sector. These revised and expanded input-output tables are now available in machine-readable or print-out form, and will be published in the coming year.

Considerable progress was made in the annual updating project which was initiated in fiscal year 1969-70. This project involves the construction of input-output tables for the years 1962 to 1967 in both current and constant (1961) dollars. Tables for subsequent years will be constructed as data become available. The procedures for the annual updating are extensively automated and make use of large amounts of new data. The target date for the completion of the current dollar series is the end of 1971.

Input-output tables for each of the four Atlantic Provinces have been constructed for the year 1965 and are now available. A publication is being prepared which will include some analytic models based upon the Atlantic Provinces tables along with the presentation of the tables.

The Input-Output Staff has continued to participate in projects and task forces intended to improve the quality of economic statistics at DBS. An increasing number of resources has been devoted to these projects, particularly in the area of service industry statistics, commodity classifications, mining statistics and the system of national accounts. It is on the basis of these projects that plans for the construction of 1971 base year input-output tables are being formulated.

With respect to activities associated with customer service and analysis, the Input-Output Staff provided a wide range of services to large corporations, researchers at universities, and provincial and federal government agencies. Two general purpose models based upon the most detailed input-output tables were constructed and made operational - an output determination model and a price determination model. At the present time, these models are of the fixed coefficient variety based upon 1961 data. Subsequent versions of these models will incorporate more recent data and modifiable coefficient methodology. These models are being maintained by the Input-Output Staff in order to provide analytical services to various researchers so that the confidential data embodied in the

data base can be utilized to the fullest extent possible within the bounds set by the Statistics Act. As well as services arising from the operation of these models, the Input-Output Staff has provided special data tabulations and technical advice to various researchers. In particular, the staff has co-operated with provincial government agencies who are engaged in input-output work.

The Input-Output Staff has continued to participate actively in the construction of a large-scale medium term economic policy simulation and projection model known as the CANDIDE model. This model is being constructed by an interdepartmental task force whose members include representatives from the Economic Council of Canada, the Departments of Regional Economic Expansion, Manpower and Immigration, Finance, the Bank of Canada, and the Dominion Bureau of Statistics.

Labour Division

The Labour Division is concerned with production of a broad and varied programme of establishment, household and administrative statistics. The subject-matter covered includes statistics of the labour force, employment, unemployment, labour income, employer labour cost, occupational job vacancies, pension plans and data relating to the operations of the Unemployment Insurance Commission and Canada Manpower Centres of the Department of Manpower and Immigration.

During the fiscal year 1970-71 progress was made in the Employment Section by the introduction of new computerized programmes for both large and small firm monthly surveys. The latter will involve use of employment data already collected in conjunction with the Job Vacancy Survey thereby eliminating separate collection and reducing response burden on the business community, especially small operators.

The results of the first survey of employer labour cost in the mining industry were published. This survey provides the first official Canadian statistics regarding the composition of the wage package in the mining industry and the cost of so-called fringe benefits.

In September 1970 a special survey of establishments in the retail trade industry was carried out. Specific objectives included the determination of the impact of part-time employment on average weekly earnings and investigation of the relationship between earnings in large and small establishments.

During the past year the Unemployment Insurance and Manpower Section undertook, for the Unemployment Insurance Commission, a special project involving the production of statistics indicating the residence of insured persons as opposed to the location of their place of employment. This information was required by the Commission in connection with validating boundaries of regions for which unemployment rates will be compiled under the proposed new Unemployment Insurance Act.

This staff also provided the coding capability for a feasibility study regarding the possibility of developing industrial accident statistics using data obtained from the Workmen's Compensation Boards of Nova Scotia and Manitoba.

During the year negotiations were completed with the federal Department of Insurance and the Pension Commissions of the provinces of Quebec, Ontario, Saskatchewan and Alberta, for a joint co-operative statistical programme for private pension plans. On the basis of this agreement, these agencies supplied data from their administrative records which were used as a main input by the Pensions Section for producing statistics regarding the coverage and characteristics of pension plans in 1969. To provide national statistics these data were supplemented by surveys in those provinces where co-operative arrangements have not yet been developed. This use of administrative records as a substitute for surveying employers substantially reduced the response burden on the business community and has produced more comprehensive and timely data than were formerly available.

In the Job Vacancy Survey Section plans were completed during 1970-71, for introduction in mid-1971, of a regular monthly statistical report providing information on occupational job vacancies by occupational group and province. These published data will be the first official measure of labour demand in Canada and will represent a substantial addition to information for labour market analysis.

At the beginning of the fiscal year, the Labour Force Survey Section was transferred from the Special Surveys Division to the Labour Division. Since the transfer was completed, steps are under way to expand and increase the usefulness of the data from the survey. These steps will include enlarging the regular publication to include additional tabulations, extended use of packaged computer programmes to reduce turn-around time on special requests, and plans for quarterly and annual publications to supplement monthly data.

During the year, the Analysis and Development Section was responsible for a number of contributions to the analytical and developmental programme of the Division. A cost-benefit study was prepared regarding the production of industrial accident statistics, a project for computerizing the disaggregation of components of labour income was developed to facilitate analysis of changes, and a contribution was made to a DBS committee investigating reconciliation of household and establishment derived employment data. The first issue of a new publication which would provide a vehicle for research and analytical articles in the field of labour statistics was also drafted.

Manufacturing and Primary Industries Division

The Division is responsible for the output of statistics in the fields of manufacturing, mining, forestry, fishing and energy. The results of these surveys are made available to users in the form of publications, bulletins and special tabulations.

During the past year the work of the Division has been concentrated on improving the quality, analysis and timeliness of its data. Improvements have been experienced in the release of advance information on a number of the surveys and acceptable progress has been made in reviewing statistical definitions, reporting procedures and alternative sources of data.

In the last report, mention was made of the joint study undertaken by DBS and the Canadian Institute of Chartered Accountants. The questionnaires have now been re-structured and the revised short form for the use of small establishments has been implemented. The revised long form is being tested with a number of large manufacturing companies and should be implemented with the 1972 Census of Manufactures.

It is worth noting that the work on the use of tax returns for statistical purposes mentioned in last year's report is progressing satisfactorily and that the Division should be able to discontinue surveying a large number (approximately 10,000) of small manufacturers within the next two or three years.

The automation of the Census of Manufactures which was referred to last year has progressed reasonably well. The automation of the mailing module has been completed and is being used in the 1970 Census. Arrangements are being made so that the master file (names and addresses) and appropriate programmes will be available to any provincial

statistical agency requiring them. It is also worthy of note that the photoprint modules also referred to should be completed in time for processing the 1970 Census of Manufactures.

The work of developing a standard industrial commodity classification proceeded more slowly than anticipated but the bulk of the developmental work has now been completed and a number of commodity classes will be implemented with the 1971 Census. Complete implementation is not expected however until the 1972 Census. One feature of the new classification is that data on domestic shipments, exports and imports will be made available on a routine basis for approximately 1,500 commodities. Comparison of domestic shipments, exports and imports will be possible for a significant number of additional commodities.

In relation to new work, perhaps the most significant items have been the provision of data on the interprovincial shipments of selected commodities, the facility to undertake projects for various users on a cost-recoverable basis and the developmental work undertaken in connection with the 1970 revised Standard Industrial Classification (SIC). Statistics for the Census of Manufactures for 1970, the year of overlap, will be published on both the 1960 and 1970 revised SIC.

A further point of interest is the establishment of a DBS/Provincial Committee on the Census of Manufactures. It is expected that through this device, the joint statistical requirements of the federal and provincial governments can be met. Finally, the Division has initiated a programme of studies in the field of industrial organization. The first phase, already well advanced, has involved an analysis of changes over time in individual enterprise shares of shipments in four industries (yielding results publishable without revealing individual respondent data). Planning is under way on a second phase, the development of a set of regularly publishable measures of industrial concentration on an enterprise and establishment basis. Consideration is being given to various other possible studies in the area of industrial organization. Liaison with users continued to form an important part of the Division's activities and the past year saw the development of close working relationships with the statistical arm of the Provincial Mines Ministers' Conference, the Council of Resource Ministers and the Chemical Industry.

Reference should again be made to the volume of enquiries handled which continue to run in the neighbourhood of 15,000.

Finally, the role of the Division in the international statistical community continued to be of importance. Officers participated actively in supplying information for a number of international agencies, training of statisticians from foreign countries and in supplying advice and assistance to statistically underdeveloped countries.

Merchandising and Services Division

The function of this Division is to collect, process and publish data on the retail, wholesale and service sectors of the economy, as well as to undertake special studies and surveys in areas related to the distribution of goods and the provision of services from primary and secondary sources to the final consumer or end user.

During the year under review, planning for the 1971 Census of Merchandising and Services continued at an accelerated rate, in the Quinquennial Census Section. The review of kind of business classifications and of the concepts and definitions to be employed in the census was completed. Draft questionnaires were circulated for comment to other DBS Divisions, federal and provincial government departments, trade associations, etc.

In addition to the census and its ensuing publications, the Quinquennial Census Section is also responsible for a quinquennial survey of retail sales by commodity classes. The results of the 1968 commodity survey will be available about mid-1971.

During 1970-71 much of the activity in the Retail Trade Section was centered around the inception (in January 1971) of the new monthly retail trade sample. Although delays and problems were encountered in the developmental phase of the project, the majority of programmes have now been completed and are undergoing extensive testing and "de-bugging". It is anticipated that the first of the new and expanded monthly retail trade publications, based on the new retail trade sample, will be released by January 1972.

Work was completed on the revision of the current monthly retail trade series for the four years ended December 1970, based on the new benchmarks of the 1966 Census of Merchandising and Services. A report on the 1966-69 period was published in the November 1970 issue of the *Canadian Statistical Review* and the 1970 data were published in *Retail Trade*, January 1971. Special reports covering the entire intercensal

period 1961 to 1969 were published in two parts; Part I was released in March 1971 and Part II will be available in June 1971.

Most of the efforts of the Wholesale Trade Section during 1970-71 were concentrated on completion of the 1966 Census material and preparations for the forthcoming 1971 Census. As a result, no annual surveys of wholesale trade were undertaken for either 1969 or 1970.

A second survey of *Construction Machinery and Equipment Sales*, covering 1969, was undertaken during the year as a follow-up to the initial survey of 1967, and the data - which measure the market for approximately 130 major commodity lines in quantitative and dollar terms - were released in January 1971. This survey will now be undertaken annually.

One of the monthly wholesale trade publications, *Steel Warehousing*, was discontinued with the December 1970 issue because of continuing poor response and lack of interest on the part of companies operating in this industry.

During the year just ended, the Service Trade Section was principally involved in updating the current publication programme, the preparation and planning for the 1971 Census and the development of new surveys in the accommodation field, franchising statistics in the food-serving industry and other fields.

Although some improvements have been made in the publication programme, they have not yet reached the desired level. For example, the annual *Hotels* survey has encountered numerous problems over the past few years, with the result that only the 1966 and 1967 reports have been published so far during 1970-71. However, the 1968 publication is in the final stages and the 1969 results (which include, for the first time, data on motels, tourist courts and cabins and other types of accommodation) are currently being tabulated.

Other annual reports issued during the year included *Advertising Agencies, 1968*, *Funeral Directors, 1968*, *Motion Picture Production, 1968*, *Motion Picture Theatres and Film Distributors, 1968* and *Power Laundries and Dry Cleaning Plants, 1968*. The 1969 surveys in these areas (with the exception of funeral directors, which is an occasional survey) were all being readied for publication as the year drew to a close.

The monthly survey of *Restaurants* and the semi-annual survey of large hotels have been maintained on schedule. The semi-annual

hotel results, showing percentage changes in receipts by provinces or regions, are published exclusively in the *DBS Daily*. A new monthly sample of restaurants was introduced in January 1971, concurrent with (and as part of) the new monthly retail trade sample. It is expected that the new sample will provide data on receipts of various kinds of restaurants, including take-out food outlets and industrial restaurants, which have not previously been available.

In the Consumer Credit and Special Projects Section, two important measures aimed at improving the quality of consumer credit statistics were related to the information supplied by sales finance and consumer loan companies. First, data on passenger cars known to be financed for commercial purposes were segregated from ordinary passenger car financing, in order to refine the consumer component of instalment financing. Second, inconsistencies in the method of reporting by these financial institutions were eliminated; commencing with January 1971, outstanding credit balances were reported on a "net" basis, i.e., excluding unearned income charges.

In addition to the above, and with the object of improving timeliness in the release of monthly consumer credit data and rationalizing the publication of allied information, it was decided that the publication *Credit Statistics* would be renamed *Consumer Credit* under the same Catalogue number but containing only the table relating to national estimates of consumer credit and the monthly and quarterly detail on the credit extended by retail stores. Remaining statistics will henceforth be released in a separate new monthly publication entitled *Sales Financing*.

The Section is also exploring the possibility of incorporating statistics on the credit extended by public utilities and by certain credit card-issuing companies in the car rental, transportation and hotel fields.

Among other projects of this Section are surveys of "non-store" retailing in Canada and the provision of data on inventories. There are two surveys at present in the non-store retailing field: *Direct Selling in Canada* and *Campus Book Stores*, both of which are published annually. In the case of inventories, the only data published are for retail chain and department stores. Plans are proceeding, however, for the design of a new sample (using, as a base, the new monthly retail trade sample) which will be used to derive estimates of inventory held by independent retail stores. Further studies will be undertaken in connection with the provision of wholesale inventory statistics.

During the 1970-71 fiscal year, the Research and Development Section was increasingly involved in the preparatory work for the 1971 Census of Merchandising and Services, including the formulation of concepts and kind of business definitions. Also, the development of a new monthly "Bulletin" was completed and the first such report, containing an analysis of the seasonal nature of sales in retail chain and independent stores, is now at the printers.

During 1970-71 the report on the Destination of Manufacturers' Shipments for 1967 was published. This was undertaken in collaboration with the Manufacturing and Primary Industries Division and shows total value of manufactured shipments by industry which originate in each province, broken down by province of first destination and export.

The Integration and Response Analysis Section was formed during the 1970-71 fiscal year and is responsible for the over-all application and integration of uniform concepts and reporting procedures in divisional surveys and for the assessment and improvement of the quality of value data reported. The efforts of the Section have been concentrated on assisting with the conceptual framework of the 1971 Census and ensuring that the resulting data will be compatible with data produced in the current statistical series of the Division. In addition, the Section will continue to be engaged in negotiations with officers of large firms, in order to properly define and classify the operations of such firms and ensure accurate reporting.

Prices Division

The function of the Division is to collect, compile and publish data on prices and consumer expenditure patterns. The Division is divided into three subject areas -- Retail Prices and Living Costs, Industrial Prices, and Central Research. In the first group are included the measurements of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing statistics on family expenditure for various types of families. Industrial prices, on the other hand, covers measurements of price movements in the production and distribution of commodities and services in which the primary focus is on the price of outputs and inputs of individual industries within the Standard Industrial

Classification. The Central Research group co-ordinates research and analysis in prices in areas common to other subject areas, including the treatment of quality change, analytical techniques and price index methodology.

In the area of consumer price indexes, progress was made in the expansion of consumer price index coverage, with the regular production of indexes for Thunder Bay and Quebec City, as part of a programme which also includes the production within the next year of separate indexes for Edmonton, Calgary, Regina and Saskatoon. Work was well advanced on a major updating of the weighting patterns of the Canada and regional city indexes based on 1967 family expenditure data. Revised indexes are expected to be available by the end of the fiscal year 1972-73. As part of the revision programme some sixty new item specifications were developed and introduced into the regular field pricing system. Work was begun on the production of estimated "actual" prices for narrowly defined item specifications, in order to meet needs which are better satisfied by price data than by indexes of price movement. To facilitate this programme as well as the weight-base revision a revised sample of retail outlets was under development. The planning of an analysis of consumer price index production procedures was undertaken as the first stage in the establishment over the next few years of an automated processing system.

Activities in the Family Expenditure Section were concentrated on the production of family expenditure statistics from the large volume of data collected in the 1969-70 programme of national expenditure surveys. Results from the 1969 household survey of family food expenditures in which some 10,000 families participated were issued in an advance release at the end of 1970, to be followed by a two-volume report *Family Food Expenditure in Canada, 1969* scheduled for publication by mid-1971. This survey provided, for the first time, average food expenditures and quantities for Canada and each of five geographic regions, classified by urban-rural location and other family characteristics. Throughout the year work proceeded on the processing, systems design and delineation of tabulation requirements for the 1969 survey of the full budget, which is expected to yield first results about mid-1971. This survey, which netted over 15,000 records of family expenditure and income will constitute a valuable data base for years to come, and for this reason a generalized tabulation system was developed which will have continuing usefulness, not only in meeting needs from the 1969 survey, but for future surveys as well. On the analytical side, multiple regression

techniques were used to implement a broad programme of research in consumer expenditure behaviour, working initially with data from 1964 and 1967 Urban Family Expenditure surveys and eventually with 1969 data.

In the field of comparative retail prices and living costs, price comparisons were carried out at St. John's, Nfld., Saint John, N.B. and Halifax, N.S., to fill gaps in the inter-city retail price comparisons published for May 1969. The results of the surveys in the Atlantic Provinces will be published in 1971 and integrated with updated indexes from continuing surveys in other provinces. The development of additional inter-city comparisons for shelter items was continued and it is expected that some results will also be published in 1971. The number of isolated posts covered in studies of retail price and living cost conditions for Treasury Board purposes in administering the allowance system for federal government personnel serving in such areas, was expanded following development and introduction of mail questionnaires to supplement information collected in personal visits. The results of surveys carried out in the West Coast region of British Columbia, the Labrador coast and Newfoundland, and the Eastern Arctic, will become available during 1971. The Division is in the early stages of work to develop a series of comparable family budgets for Canada as a whole and for major cities. These budgets are intended to provide measurements of place-to-place living cost differentials, as opposed to the pure price comparisons of the current studies. Consultations with other departments and agencies are being conducted to assist in formulating programme objectives and to agree upon methodology for establishment of comparable quantities and quality levels of goods and services to be included in the various regions. Provision was made for extension of the comparative price programme to other smaller cities through joint cost-sharing arrangements between the sponsoring community, the province, and the Bureau. Continuing the International Prices Section's support of the Canadian Government's foreign service allowance system for expatriate civilian and military employees, full-scale retail price and living cost surveys for 36 foreign cities were analysed. Abbreviated surveys were analysed for 16 additional locations. In addition, the results of previous comparative living cost studies for all locations, where Canadian personnel are serving, were reviewed and updated where warranted in the light of current price and exchange rate situations including the implications of the strengthening Canadian dollar. A full survey of shelter costs for military personnel serving

in Europe was launched with analysis scheduled for early 1971-72. Analysis of a world-wide family expenditure survey of Canadian government personnel abroad comprising returns from some twenty-five hundred respondents was largely completed and will be finished in early 1971-72. During the year under review, officers of the Section visited nine locations in the Caribbean and Central America where Canadian government personnel are serving.

In the industrial prices field, publication of indexes of manufacturers' selling prices was continued for ninety-eight industries and for four hundred and twenty commodities in manufacturing industries. Within these published indexes, on a 1961=100 basis, an additional forty-four new commodity indexes were developed and published and fifty-nine others were classified as "releasable, but not published".

A major revision of the Price Index of Commodities and Services Used by Farmers - Farm Operation, is in the final stage, and it is expected that the revised series will be released shortly. Total, group and some item price indexes will be published quarterly for Eastern, Western and all Canada from 1961 on a 1961 time base. While price indexes at the total and group levels are not produced by province, a wide range of item price indexes relating to provinces or economic regions will be available on request.

The development of price indexes related to capital expenditures continued during the year. In residential construction, the price sample of single-unit houses constructed by large builders was expanded from five to seven cities and the study of an alternative method of measuring price change for single-unit houses utilizing regression techniques was continued during the year. In the area of non-residential construction, the first direct pricing of a commercial office building was completed employing the technique of pricing completed components of work-in-place. In 1971 the same building will be repriced in four cities together with a light industrial building. This latter building will be priced on the basis of a sample of major items of work-in-place. In engineering construction, a provincial highway construction price index for Quebec was released for the first time. Prices used in this index related to contractors bids for work-in-place. Work continued on development of indexes of electric utility construction and publication of a price index for hydro-electric generating stations is expected by mid-1971. Development work also continued respecting pricing of commodities for which

there is no regular production of identical items from period to period, i.e., unique goods. This work is concentrated presently in the fields of electrical utility equipment, railway rolling stock, precast concrete, fabricated steel, laminated timber and prefabricated housing. The review of price indexes of machinery and equipment purchased by industry progressed during the period and the index for the construction industry will be published by mid-1971.

In the service industries group, further development of price indexes of freight rates was undertaken with investigation of data sources and preliminary negotiation to obtain data for design of weighting diagrams and price samples.

The systems analysis of the Industrial Prices Automation Project begun in 1970 continued through the year. The project is divided into nine phases. The Systems Analysis and Design Report for the first phase (Phase A - Selection of Industry, Commodity and Establishment Samples) was completed. The systems analyses of the remaining phases are in progress, with completion of all phases expected by the fall of 1971. The complete system is expected to be operational by mid-1972.

Transportation and Public Utilities Division

This Division is responsible for a comprehensive statistical programme covering transportation and public utilities in Canada, and consists of three sections: Transportation, Public Utilities and the Aviation Statistics Centre. A variety of surveys are carried out covering financial, traffic and operating statistics for each mode of transport, both passenger and freight. These include urban transit, the inter-city bus industry, the motor carrier industry, household goods, moving and storage, rail transport, air carrier operations, air passenger origin and destination, water transportation, shipping and canals. Various related services, facilities and operations such as international toll bridges, tunnels and ferries, warehousing, road and street mileage and expenditures, airport station activity, aircraft movements, motor vehicle registrations, rates and regulations, fuel sales, revenues and traffic accidents are also covered. Telephone, telegraph, radio and television broadcasting and cable television industries are surveyed in the Public Utilities Section. These surveys also include detailed information on financial and operating statistics.

In view of government control and regulation of the transportation and communications industries in Canada, a unique and highly important aspect of the work of the Division consists of providing the statistical requirements of various regulatory agencies in these fields. This includes each of the Committees of the Canadian Transport Commission - the Water Transport Committee, the Rail Transport Committee, and the Air Transport Committee. During the year, the Motor Vehicle Transport Committee commenced phasing in its regulatory function and the Division assisted the Committee in a major survey of extraprovincial motor carrier companies.

With the passing of the Broadcasting Act on April 1, 1968, the Canadian Radio Television Commission assumed regulatory responsibility for the community antenna television industry in Canada. A joint DBS-CRTC co-operative reporting agreement was drawn up during the year and a uniform period of reporting established for the industry. A similar co-operative agreement with the CRTC covers radio and television broadcasting in Canada.

In addition, the Division has a number of co-operative collection arrangements with several provincial motor carrier regulatory boards and public utility commissions.

The Division's Aviation Statistics Centre and Public Utilities Section provide many of the statistical requirements of the Department of Transport and the Department of Communications, respectively.

During the year, a comprehensive review of the entire statistical programme of the Division was commenced. Assessment teams were established to critically examine gaps and deficiencies in coverage, under or over reporting, quality, accuracy and timeliness of data, survey methodology, collection, compilation and processing procedures, etc. This involved contacting important respondents and data users to assess their need for new or additional data in the light of industry developments, accounting, classification or other changes. A number of changes and procedures have already been or are in the process of being implemented in various programmes, as a result, and include: a new survey covering container movements (origin and destination) and possibly details of commodities transported, a co-operative arrangement with the St. Lawrence Seaway for the processing and reporting of Canal Statistics, discontinuance of Part VI of the Shipping series (*Commodity Flow Charts for Selected Commodities*), a review of the *Motor Carriers - Freight* series, a review of all communication surveys

to improve coverage, the expansion of telephone, telegraph and cable statistics, re-activation of the DBS Advisory Committee on Rail Transport Statistics and three of its working subcommittees, introduction of Service Bulletins into each subject-matter area to accommodate requirements for various types of unpublished information quickly, the introduction of promotional brochures in each subject-matter area, and introduction of changes to improve timeliness.

During the year the Division conducted a pilot survey to determine the feasibility of obtaining commodity, origin and destination data for trucking. Shipping documents of one kind or another were sampled from some two hundred for-hire trucking companies by specially trained representatives of DBS. Various experimental tabulations and cross-classifications of the data were compiled and analysed to provide estimates of interprovincial commodity flows. The success of this pilot survey established the feasibility of obtaining commodity flow data in this way and as a result a much larger survey will be carried out during 1971-72.

As outlined in previous years' reports, the new expanded *Railway Carloadings* report was successfully completed during 1970 despite reporting and other problems inherent in any new data system. Also, the quarterly *Railway Freight Traffic* publication was converted to a new commodity structure based on the DBS Standard Commodity Classification. This has produced much better comparability between railway statistics and other commodity series published by DBS.

During the year, the Aviation Statistics Centre participated in the negotiation of the Canada-United States bilateral agreement concerning scheduled air services between the two countries. Also, this year saw the launching of five new publications by the Aviation Statistics Centre:

International Air Charter Statistics is a new quarterly publication representing the sole official source of information on this important and growing area of air transport. Requested by the Air Transport Committee of the CTC, the new survey covers the charter activities of all air carriers between Canada and other countries using aircraft with a gross take-off weight on wheels in excess of 18,000 lb.

Two new reports on *Air Passenger Origin and Destination* were produced. The *Domestic Report* is a continuation and expansion of a series previously released by the Air Transport Committee, while the *Canada-United States Report* combines for the first time in a single publication, data on air passenger

traffic between Canada and the United States. Inclusion of the US data is the result of a quarterly exchange of magnetic tape records between the US Civil Aeronautics Board and the Aviation Statistics Centre.

Transcontinental and Regional Air Carrier Operations is a monthly publication covering the operations of seven air carri-

ers, representing over ninety per cent of gross flying revenues.

Air Carrier Operations in Canada, a new quarterly report provides information which previously appeared in *Civil Aviation Monthly*. In addition, a report on *Aircraft Movement Statistics* was produced for the Department of Transport.

SOCIO-ECONOMIC STATISTICS BRANCH

The Socio-Economic Statistics Branch is responsible for a wide range of demographic, sociological and economic statistics which deal predominantly with information about persons and families derived from household and institutional sources. They include the following: censuses of population, housing and agriculture; statistics on elementary, secondary, higher and adult education, vocational training and school finance; agriculture statistics; health, vital and judicial statistics; family income, assets and liability statistics. The Branch is also responsible for the field operations of the Dominion Bureau of Statistics including the Labour Force Survey, and eight regional offices, as well as for provincial liaison and consultative services.

The organization of the Branch comprises the following units: a small Branch headquarters staff; Agriculture Division; Census Division; Consumer Finance Research; Education Division; Health and Welfare Division; Judicial Division; Provincial Liaison and Consultative Services; and the Field Division.

Agriculture Division

The prime function of the Agriculture Division is the planning, operation and co-ordination of a statistical system for the collection, evaluation and publication of annual, monthly and seasonal information concerning the agricultural industry. Specifically, this includes crop acreages and livestock numbers, production, utilization, value and prices of farm commodities, farm wage rates, farm expenditures and receipts, farm capital, physical volume of output, domestic consumption of food, stocks of agricultural products, farm inputs, farm practices, and indexes of farm prices. Much of the data is collected directly from farmers and agricultural industries by means of mail questionnaire surveys on a sampling or partial coverage basis. Administrative data collected by governmental departments and agencies are

also a source of valuable agricultural statistical information for the Bureau.

The statistical programme of the Agriculture Division is conducted in close co-operation with provincial government departments with which the Division has joint surveys and other work-sharing arrangements. There is also close collaboration with agencies such as the Canada Department of Agriculture for the purpose of procuring administrative statistical data.

During the year the Division continued to plan and implement a programme for the automation of its data processing and the improvement in timeliness of data preparation and publication. The annual Federal-Provincial Conference on Agricultural Statistics, held at the latter part of the year, featured the participation of representatives of farm organizations, credit advisers, and publicity agencies. The theme of the Conference centered on the present and future statistical needs of the farming community, the format in which data should be presented to farmers, and the means of dissemination.

An interdepartmental committee involving the Bureau and the Canada Department of Agriculture was established to consider the needs of the Department for new, more timely and better quality data to deal with the rapid changes taking place in the structure of agriculture and the demands for policies to meet new developments. These discussions were also concerned with the development of new and more sophisticated survey methods to meet these requirements.

The Division is presently organized into the following Sections: Crops, Livestock and Animal Products, Farm Income and Prices, and Special Projects and Research.

The Crops Section is responsible for a programme of collection, analysis and publication of statistics and market information on field and horticultural crops for Canada and the provinces. Much of the data on the

principal grain and oilseed crops is collected largely by means of mail questionnaire surveys of farm correspondents. Information is published on growing conditions, acreage intentions, fertilizer use, probable yields, farm-held stocks of grain, prices received by farmers and crop production. Allied with these surveys are those of the grain milling and oilseed crushing industries. These statistical systems are designed to meet the information requirements of farmers, marketing agencies and allied industries. Data obtained from these farm surveys are integrated with a vast array of statistics emanating as by-products of the operations of the Canadian Wheat Board, Board of Grain Commissioners, trade groups such as the National Millers' Association and several government departments to provide continuous studies of the supply, movements and trade of Canadian cereals, feed grains and oilseeds. An agriculture reporting programme relative to world trade in grain and oilseed crops is maintained through the co-operation of the Canadian Trade Commissioner Service in order to provide a better assessment of Canada's position in the international trade of these commodities as well as of new and changing policies affecting this trade.

In addition to the regular statistical programme, numerous research studies were carried out in 1970-71 to meet the economic and statistical requirements of both the government and private sectors.

The monthly survey of forage crop seed processors established in 1967 was designed to collect such data as seed purchases and inventories on hand. This series provides an indispensable check on production of these crops as well as a picture of marketing patterns. In an effort to obtain more information at the farm level, a post-harvest mail survey was carried out in the fall of 1970. A special survey of mustard seed growers, along with the regular survey of seed corn sales, was also undertaken.

The Special Crops Unit is responsible for statistical and subject-matter output systems relating to horticulture crops, honey and maple products, on a national and provincial basis. Large volume mail questionnaire surveys form an essential part of the data collecting system. However, mail questionnaire surveys do not provide unbiased data that can be used for testing the objectivity of the response on the part of the respondents. Accordingly, systems to test quality are necessary and are being designed. In recent years objective random sample surveys involving statistical and biological variables have been used in forecasting the peach, grape and sour cherry crop in Ontario. Results obtained from these objective esti-

imating surveys show that, for the most part, these techniques are quite satisfactory for these crops. Two of the most extensive surveys carried out in the Unit are those of the greenhouse and nursery industries.

The Research Unit is associated with much of the development work undertaken in the Crops Section involving the application of probability sampling methods. A major revision of the objective grape survey was undertaken last year, and the objective sour cherry probability sample is currently being redesigned. A pilot study to provide unbiased estimates of potato yields by variety and grade in the Maritime Provinces is now being planned. Preliminary studies have been undertaken on the possibility of collecting crop yield data using a questionnaire that will permit the transfer of data directly from questionnaire to computer tape by an optical character recognition device.

The Livestock and Animal Products Section provides a comprehensive body of statistical information covering most aspects of the Canadian livestock industry. The ongoing programme of the Section consists of publishing a series of periodic reports on the following commodity groups: milk and manufactured milk products, cattle and calves, pigs, sheep (including wool), horses, poultry and eggs, and furs. The activities of the Section during the past year were directed, in the main, towards improving the effectiveness of the methodology for the ongoing programme. In addition, several new areas of need were identified and the feasibility of meeting these needs is receiving close study.

One of the more important projects undertaken during the year was the publication of the handbook of dairy statistics. This publication includes a large number of the most important dairy statistical series, dating back to 1920.

A study indicated that the production of unsalted butter was not sufficiently large to warrant the collection of information more frequently than once a year. This survey was expanded to include cultured butter. A request to collect statistics of substitute dairy products was investigated, but no satisfactory conclusion has yet been reached. A survey to obtain more detailed information from dairy farms is under study. The goal is to measure structural change taking place in the dairy industry at the primary producer level through the monthly dairy correspondent survey. Traditionally, milk utilization has been shown on a milk equivalent basis, which considers only the butterfat component of milk. Due to changing use patterns, efforts during the past year have been directed toward developing a method to show milk utilization on a not-fat solids basis.

Arrangements have been made with the Canada Department of Agriculture district poultry offices to collect, compile and forward monthly data on cold storage stocks of poultry products to DBS for publication. The Section discontinued collection of storage stocks of fresh poultry products in 1970. This decision was made jointly with the Canada Department of Agriculture and follows the pattern set for reporting stocks of red meat a year earlier.

In the area of livestock statistics a study was initiated, in co-operation with the Canada Department of Agriculture, to examine conversion factors used to derive grain-consuming animal units. There is need for these units to reflect current feeding practices in order to plan for storage facilities, transportation requirements, exports, imports, and other related activities. The past year also saw considerable work being done on the revision of small-area livestock estimates from 1951 to date. Increased emphasis on regional economic planning has increased the demand for county and census division data.

During 1970 the size of the monthly survey of egg producers was increased with particular emphasis placed on obtaining regular reports from large-scale poultry enterprises. With a high percentage of the eggs now being produced on large specialized single enterprise farm units, it is important that they be adequately represented in the sample and the returns stratified by size of operation.

The annual census of chinchilla ranches was discontinued in 1970 after conferring with federal and provincial government departments and the trade.

A refinement to the "Replicated Sampling Method" for making livestock and poultry estimates was introduced to account for class jumping by producers from one size stratum to another. Although the method is still under study, initial results look quite promising.

In 1970, the livestock portion of the June-December Survey of Crops and Livestock was processed for the first time using electronic data processing techniques. All three Units of the Section made substantial progress towards placing historical data in the Bureau's data bank (CANSIM). Apart from making data readily available, the data bank will permit manipulation and analysis of stored data.

Throughout the fiscal year 1970-71 the Farm Income and Prices Section continued

its regular programme of activities dealing with the production of statistical series measuring farm income, expenditures, prices, capital investment, land values and wage rates. In addition to improving the quality and timeliness of many of these estimates, the Section became involved in several major new developments.

In response to many requests and to meet the requirements of the 1970 Canadian Agricultural Outlook Conference, forecasts of farm income on a provincial and item basis were developed for the first time. An examination of such forecasts in early 1971 suggested that the accuracy was generally very satisfactory. The reception of this forecast information was especially encouraging and a project for forecasting cash receipts on a quarterly basis is presently in the development stage. In a further attempt to provide decision-makers with up-to-date information on the state of the agriculture sector, monthly farm cash receipts are now being calculated. Such estimates are available approximately 35 days following the reference month and, together with comparative historical information, are now being forwarded to all provincial statisticians. Supporting these programmes is the development of manipulative and retrieval systems associated with the Bureau's data bank (CANSIM).

The Special Projects and Research Section has a major responsibility in the planning, development and implementation of computer systems for the processing, storage and retrieval of data collected in surveys conducted by the Agriculture Division. These activities involve co-ordination of the work by commodity statisticians in the Agriculture Division and technical specialists in the Methodology and Systems Branch. The Section also participates directly in defining the requirements for data processing and in specifying the contents and format of data input and output. During 1970-71, work was concentrated on identifying the requirements and developing the design of computer processing systems for (1) the June and December Surveys of Crops and Livestock and (2) the Central Register of Farms.

The Agriculture Division followed with keen interest the progress of the Farm Economics, Co-operatives and Statistics Branch, Ontario Department of Agriculture and Food (ODAF) in the development and implementation of a system for computer processing of data from the December Survey of Crops and Livestock, 1969, for Ontario. The success achieved by ODAF encouraged the Agriculture Division to consider an adaptation of this system which would provide similar capabilities for processing data from the June

Survey of Crops and Livestock, 1970, for the Prairie Provinces and British Columbia. Use of the IBM 1287 Optical Character Recognition (OCR) scanner to generate survey data files on magnetic tape was the feature of the data processing system developed by ODAF which provided the greatest stimulus for the Agriculture Division to proceed with the introduction of a computer system for processing survey data. The OCR system offered an effective alternative to keypunched data cards and the card reader for transferring the survey data from questionnaires to magnetic tape in machine-readable form.

Early in March 1970, the Agriculture Division began testing the OCR system of data transfer and the ODAF processing procedures, using data for British Columbia from both the June and December Surveys of Crops and Livestock, 1969. After evaluation of the experience and results obtained from these test operations, the decision was made to initiate a modified version of the ODAF system on a production basis to process data in the livestock sections (cattle, pigs, sheep and horses) of the June Survey of Crops and Livestock, 1970, for the Prairie Provinces and British Columbia. Operation of the system was extended for the December Survey of Crops and Livestock, 1970, to include the data in the livestock sections for Quebec, and the poultry and farm expenses sections for all five provinces.

Use of the modified ODAF system will be continued only until operational capability is attained with a system designed specifically to provide fully for the requirements of the Agriculture Division. Work on the development of this system was started in April 1970, with the assignment of a computer systems analyst to the project. The proposed design of the system provides for: (1) retention of the OCR scanner for transferring survey data from questionnaires to magnetic tape; (2) the capability for processing survey data to produce indicators used in the estimating procedures for current agricultural statistics; (3) the flexibility to permit changes in the specifications for editing the survey data and the contents of the output tabulations and (4) a simple data file structure to allow the use of generalized computer programmes currently available in the Dominion Bureau of Statistics for the retrieval and manipulation of data.

This design is considered as an interim step in the development of a more sophisticated system which will incorporate the additional flexibility in data retrieval and processing required for intensive statistical research and data evaluation.

The development of a new system for addressing questionnaires, designated as the

Central Register of Farms, will extend the capabilities of the present system. The Central Register of Farms is intended to be more than a source of names and post office addresses for farm operators. To extend the functions of the Register, each individual data record will contain, in addition to items for identification of the farm holding, several types of information which can be used for a variety of statistical purposes. Size of the holding and production activities at the census reference date will be identified by a set of values, including total acres of land, acres seeded to major crops, numbers of livestock and poultry, value of land and buildings, and cash receipts from sales of farm products during the previous year. A series of codes, indicating the commodities produced on each holding at the census reference date, will be updated according to information reported on commodity sample surveys. The data record for each agricultural holding on the Central Register will provide for a record of the response to survey questionnaires mailed to the operator. These are the basic types of information to be maintained on the Central Register of Farms, and which are potentially useful in developing ad hoc surveys for special purposes or for redesigning regular periodic surveys to extend the scope and to refine the quality of the information collected.

Census Division

During the past year, the Census Division directed its main emphasis toward the final preparation of the 1971 Census of Population, Housing and Agriculture. With the experience gained from an extensive testing programme which began in 1966 and which included a Trial Census in 1969, final revisions and modifications were made in the "Self-enumeration" census. In 1971, for the first time in Canada, householders will complete the census questionnaire for their own households, except in certain remote areas such as the Newfoundland outports and the Northwest Territories, which will be enumerated by the traditional canvasser.

As a part of the new technical methods to be employed, the questionnaires will be microfilmed, after which, the microfilmed information will be transferred to computer tapes.

A series of quality checks has been included in the field and office operations throughout the eight Regional Census Offices in order to ensure as complete and accurate a census as is possible, while an extensive

publicity programme has been designed to provide information and direction to the household respondents.

Development of the tabulation programme for research studies will be continued and work has started on several of the proposed projects within the evaluation programme.

To begin with, a Field Information Reporting System was introduced to control expenditures in relation to the progress of operating certain specific tasks in the 1971 Census.

The Census Division has directed considerable effort toward improving the effectiveness of the computer storage and retrieval of data. Master files have been established for the urban centres designated for geocoding. Geocoding could be used to describe any Address Register at the users' request and in this vein, the Census Division was represented on a Task Force to consider the feasibility of a DBS Address Register.

Initiated in 1969, the Census Data Access Programme has been designed to cope with the expected increase in requests following the completion of the data. The programme envisages the dissemination of data through magnetic tapes, disc packs and microfilms as well as through printed media. A dictionary of census terms and a catalogue are under way in order to assist the user as he describes his requirements.

While the prime concern during this fiscal year has been the 1971 Census, ongoing activities included the release of the regular series of estimates of population and families, and the updating of current statistics on citizenship, immigration and emigration. A new series, "The Population Projections for Canada - 1969-84" was completed and published, and plans were laid for the 1971 issue of this series. Two special reports, "Population Estimates by Provinces as a Variable of Fiscal Equalization Formulae", and "Mother Tongue for Counties and Census Subdivisions, 1961 Census" were released. The number of requests for searches of early Census and National Registration records for proof of age totalled 33,000 for the year.

The Division represented the Bureau at a number of national and international meetings during the year, including the Conference of European Statisticians, Population Association of America, Organization for Economic Co-operation and Development (OECD), Canadian Economic Association (CEA), and the Canadian Statistical Association (CSA). A number of meetings were attended, relating to data use and access, such as the

Seventh Federal-Provincial Conference on Economic Statistics, the FAO Conference on Food and Development, a Conference on the Establishment of an Information and Research Centre for the Social Sciences. Liaison was maintained throughout the year with the United States Bureau of the Census and other international statistical agencies. The Division continues to provide consultative services, including discussion of 1971 Census plans, to various government departments and agencies, universities and private concerns.

Consumer Finance Research Staff

The Consumer Finance Research Staff conducted the 1968 Survey of Consumer Finances in which 22,000 family units were interviewed, thus providing the largest range of income data available since the 1961 Census. The main report from this Survey, *Income Distributions by Size in Canada*, was released at the end of 1970. Special reports will be published in 1971 to include a study of the work experience of the labour force and a report on the low income populations. Data from the latter study were made available to the Senate Committee on Poverty. Other reports to be released in 1971 are on census family incomes and comparative income distributions for the 1965-67 period as well as an econometric research study of Canadian family incomes.

The 1970 Survey of Consumer Finances was carried out in May 1970 and comprehensive data on incomes, assets and indebtedness were collected from a sample of approximately 12,000 households. This was the fourth Survey of Consumer Finances to collect asset and debt data, but the first such survey to include farm households. Preliminary income data from the survey were released early in 1971 and the main reports on the income distribution and on balance sheets will be published toward the end of 1971, or early in 1972.

The staff assumed responsibility for the annual Survey of Household Facilities and Equipment and was responsible for the preparation of the 1970 report. Plans are being made to improve these surveys by providing data on the characteristics of households as well as on facilities and equipment, by periodically integrating these surveys with the Surveys of Consumer Finances. Plans were completed for an experimental re-interview survey of 1,500 households to be carried out in May 1971. The households to be re-interviewed were in the sample of the 1970 Survey of Consumer Finances. The purpose of the survey is to test alternative approaches to the collection of data on annual changes

in assets and debts. Households will be asked to report net changes in selected asset and debt holdings throughout the previous year as well as amounts held or owed in 1971. The data collected will be matched with data supplied by the same respondents in May 1970, in order to evaluate the effectiveness of recall questions on savings in comparison with the savings estimates derived from the comparison of balance sheets at different points in time.

The development of estimation procedures for annual estimates of income for counties and census divisions was completed during the year. A description of the sources and methods as well as estimates for 1966 will be published in the April 1971 *Canadian Statistical Review*. Estimates for 1967 to 1969 will be released during the coming fiscal year and a reference paper will be published. These studies have been made available to researchers and others working with income tax statistics.

A member of the staff is representing Canada on an international committee working on the development of a conceptual framework for a system of income and expenditure distribution statistics as a complementary system to the National Accounts. At a meeting in Geneva in October 1970, Canada agreed to participate in an international study of income distributions data to be developed consistent with that proposed in the international concepts. Other countries participating include the United Kingdom, France and Hungary. Participating countries have agreed to attempt to complete the study by the end of 1972. The research for the international study will be carried out by the Consumer Finance Research Staff.

Increasing attention is being given to policy requirements in the field of social statistics and to evaluating existing social statistics. A departmental committee has been set up to study international recommendations for a system of social accounts and to develop proposals for a possible Canadian system. The Co-ordinator is a member of a small working group set up to develop specific proposals as to requirements for social statistics data. An interdepartmental committee has been established under the chairmanship of the Co-ordinator, to organize working groups on selected problems in the area of the statistical measurement of levels of living, possibly considering social indicators, comparative budgets and poverty studies.

Members of the staff participated in the planning of the subject-matter tabulations and reports to be produced from the 1971 Census of Canada as well as on preliminary planning of the 1971 Census. Members

of the staff participated in other DBS working groups in such fields as pension plan statistics, the development of new data from income tax statistics and the planning of changes and improvements in the DBS household survey structure. Considerable assistance was provided to a number of government studies, task forces and royal commissions, as examples, the social security white paper, the Royal Commission on the Status of Women and the Senate Committee on Poverty and the study on urban problems. A member of the staff contributed to the study on urban poverty to be released by the Department of Urban Affairs. The Co-ordinator was a member of an interdepartmental committee set up by the Social Planning Committee of the Cabinet to study and make recommendations to the Cabinet on the Report of the Royal Commission on the Status of Women. Consultative assistance was also provided to private individuals and organizations such as the Canadian Council on Social Development and the Canadian Tax Foundation which were preparing briefs to the government or carrying out research.

Education Division

The Education Division is responsible for the collection, interpretation, and analysis of statistics related to education.

Education in Canada has undergone such a significant change in the last decade that enrolments have more than tripled at the post-secondary level. New types of institutions have been established to provide alternatives to the universities, and expenditures on all levels of education have mushroomed from \$1.46 billion in 1959-60 to \$6.85 billion in 1969-70.

The Education Division has been reorganized to cope with the resulting and ever-increasing demand for data. There are now five subject-matter Sections (Student, Facilities, Teacher, Financial, and Cultural Information), a Projections Section, and a Systems and Development Section.

Considerable progress has been made in the Education Division towards automating its surveys. The all-important task of creating standard classifications, definitions, and codes for automatic processing has proceeded apace. Plans have been laid for developing computer systems for each subject-matter Section, and the considerable enthusiasm of provincial Departments of Education and other respondents bodes well for the success of these systems.

A new programme on interprovincial movement of students which has been discussed with DBS officials and some Departments of Education, will be implemented for the coming year 1971-72. This will give interested parties information by sex and age on the elementary-secondary student population moving in or out of the provinces.

A series of publications, dealing with the totality of education by region, was initiated. Included are publications covering the Atlantic Region, Western Canada, and North of the 60^o Parallel. By next year, a uniform automated system of enrolment statistics for Canadian universities will be available to provincial and federal agencies. Work is almost complete for the publication of data on enrolment in elementary and secondary schools covering the school years 1963-64 to 1968-69. Plans are in progress to do the same for the school years 1969-70 and 1970-71; this will help meet the demand for enrolment data at the elementary-secondary level for recent years.

The first edition of a new annual publication on Canadian Community Colleges and Related Institutions was released in September. This 60-page report covered all post-secondary student enrolments and graduations by institution, programme, age, and sex in both terminal vocational and university transfer programmes.

A course title classification coding system was developed, which will serve both as a basis for standardizing tabulations of vocational training and as a part of the special survey of training in industry undertaken for Manpower and Immigration.

During the last year considerable effort was made to improve the quality and coverage of university enrolment statistics. In particular, the amount of information provided on graduate students was increased vastly and new tables were provided for particular areas of professional education such as engineering, dentistry, medicine, educational nursing.

In the past year and in co-operation with other federal agencies, the ground work was laid for an entirely new approach to the area of university statistics, whereby the Division is presently revising the collection programme so that the data respond to the analytical requirements of a varied and important clientele. For the first time, compilations will separate diplomas awarded from degrees awarded; they will give an idea of the area of study of most persons graduating with a Bachelor degree, and also data will be provided by institution instead of by province only.

The 1970-71 fiscal year was the first year of operation for the Teacher Information Section. The Section assumed the responsibility of collecting data of educational staffs at all levels of education. Surveys of trade and vocational staffs, together with a study on the supply and mobility of university staffs will eventually provide individualized personnel records.

During the year under review, the Financial Information Section undertook comprehensive studies of public expenditures on education since 1960, and on financial aid provided to students at the post-secondary level by federal and provincial governments.

In its initial year of operation, the Cultural Information Section is continuing its regular surveys of libraries while developing new programmes for publication in 1971-72 to include a survey of Museums, Galleries and Archives, facilities for the Study of the Arts in Canada; Canadian Literary Awards; Professional Companies for the Performing Arts; Music Competition Festivals in Canada and the activities of Craftsmen in Canada.

The publication *Advanced Statistics of Education* has been improved and enlarged. Appearing early in September, it shows enrolment and other variables for the previous school year, preliminary figures for the year just completed and estimates and forecasts for the two following years. Publications from the Projections Section for 4-year time series, will show current trends in enrolments and the totals for the last school year.

Health and Welfare Division

The Health and Welfare Division, comprised of four Sections, is responsible for the production of statistics on the status of the health of the Canadian people, the occurrence of illnesses, and the distribution, cost and availability of health care and treatment. The Vital Statistics Section concerns itself with birth, death, marriage and divorce. In addition to carrying out general surveys of these events, the Section conducts special studies, for example, in mortality, fertility and life expectancy. The Mental Health Section considers the measurement of patient characteristics and patient movement as these relate to mental disorders and the use of psychiatric facilities. The Public Health Section is responsible for the investigation of individual conditions and personal characteristics of patients in general and special treatment

hospitals and in tuberculosis institutions, the volume of newly discovered cases of malignant neoplasms and the incidence of communicable diseases. The Institutions Section collects data on the services, facilities, staff and finances of general and special hospitals and mental and tuberculosis institutions, the operations of agencies providing related health services or types of related domiciliary care, and the supply and demand for health manpower resources.

All four Sections attempt to integrate their current and previous output, so as to facilitate the elucidation of trends. The Division, on occasion, conducts non-repetitive, special investigations. It is intended to extend both in broad and in restricted terms, the coverage of the areas assigned to it.

The Division met its statutory obligations in the field of vital statistics by supplying basic, annual tabulations of births, stillbirths, marriages and deaths as required under Dominion-Provincial Agreements. The Division has continued to supply alphabetic registers of births, marriages and deaths to the provinces and to the Family Allowances Administration for certification and verification purposes.

Demands for information continued at a high level, largely from public health officials, education authorities, individuals engaged in medical research, manufacturing and distributing firms, market research agencies and other government departments and from the public at large. Of particular interest were the requests for intensive investigations of the patterns of nuptiality and fertility, occasioned by the drastic changes in the birth and marriage rates in recent years. New developments in hospital and medical care have added to the demand for information on mortality, due to particular diseases reported as causes of death. Most of these requests required special calculations and compilations, as the information demanded was not available in any published form. Analytical studies have already been planned and published relating to cancer, accidents, suicide, heart disease, foetal and infant mortality, nuptiality, fertility, and life expectancy, in an attempt to show the direction and magnitude of the trends. These reports and studies have been supplemented by a series of technical reports which deal with methodological techniques of life-table construction, statistical measures of trends, and the techniques for projections of births, marriages and deaths. In addition, calculations on fifteen-year projections of births, marriages and deaths were initiated as the base for population projections for demographic and economic planning

purposes. "Record-linkage" projects for fertility and population projections have been planned to indicate the interrelationship of infant and pre-school mortality, reproductive histories and family-planning patterns.

To reduce the cost and time to process vital statistics, arrangements have been made with the five largest provinces to share the cost of producing basic statistical records, thus necessitating standardization of certain statistical procedures. Further economies, and even more complete co-operation with provincial authorities, are being effected through computerization, in an effort to advance publication dates and thus to provide accelerated service.

Discussions with provincial authorities are progressing toward the adoption of a geographic classification for population projections and for short- and long-term social and economic planning.

Arrangements were made with the Department of Justice for the collection and compilation of divorce statistics under the new Federal Divorce Act, which became effective in July 1968. This system will provide extensive information about the characteristics of the individuals and the number of dependents involved.

The present series of statistics on causes of death, begun in 1971, will be extended to include all medical diagnoses reported on the death certificates. The objective here is to provide detailed epidemiological information, which will give an insight into the etiological processes and interaction of diseases which lead to premature death. This new statistical series was made possible through the use of new computer techniques developed and made available to DBS by the U.S. Public Health Service.

Each year, the Division acts as the Secretariat to the Vital Statistics Council for Canada. Although certain of these problems relate to the legal and administrative features of the vital statistics system, others extend to the general sphere of social statistics. As an illustration, a full investigation to redesign the present registration forms used by the provinces, was undertaken for the purpose of standardizing the content, size and format of the records used by the provinces, subject to local legal requirements. The records serve both legal and statistical purposes and will be put into effect across Canada by January 1, 1973.

The Mental Health Section fulfilled its responsibility to provide information concerning the social, demographic and medical characteristics of patients being treated in psychiatric in-patient facilities together with a report on the movement of patients admitted and separated during 1970-71. Brief, up-to-date information, summarizing the data on patient movement within the reporting psychiatric facilities was released in a Parliamentary Report in January 1971. The 1970 Parliamentary Report provides detailed information on patient characteristics, stated in detailed diagnostic tables including drug dependence tables which will list the drug responsible for the particular dependence. In recent years, there has been an accelerated development of specialized treatment facilities for intensive but short-term care for all types of mental illness; nevertheless, conventional treatment of mental illnesses has continued in general hospitals with out-patient psychiatric facilities. The Section has started a preliminary analysis of in-patient units, and has also initiated discussions with certain provincial Departments of Health and Welfare in order to establish means by which data might be collected for individuals being treated in out-patient psychiatric facilities and in non-specialized in-patient facilities in general hospitals.

The increased demands from social scientists, social workers, federal, provincial and private agencies has prompted the Mental Health Section to use general purpose computer programmes and to redesign particular programmes in order to better serve the user and to reduce costs. The Mental Health Section has undertaken to develop and expand its general morbidity statistics output which concerns in-patient hospitalization together with the incidence and treatment of particular diseases. The Section is presently collecting morbidity information on chronic respiratory diseases and diabetes. Reports were published on the incidence of cancer in Canada during 1969 and on surgical operations performed in general and associated special hospitals. Both these reports were produced by photographing computer output.

The French manuscript of the *Classification internationale des maladies*, adaptée was published in 1970. In the companion volume which has been translated into French, all the medical terms have been converted to machine-readable form for alphabetic arrangement by computer and photoproof production. Information Canada is converting the computer output into the printed volumes. Both these volumes will be distributed nationally as well as internationally by Information Canada.

The changes in the legislation for Therapeutic Abortions under Section 18, Criminal Law Amendment Act, 1969, led to establishment of a monthly reporting system of the number of abortions performed in general and associated special hospitals. This project was undertaken at the request of the Department of Justice, and in co-operation with the Provincial Hospital Insurance Commissions. Since only eight of the ten provinces participated, the monthly reporting system did not produce satisfactory data, and as a result, reports were sought directly from the individual hospital performing the operations.

During this fiscal year, the Institutions Section carried out a number of major developments associated with the operations and finances of hospitals and the supply and demand for health manpower. A survey conducted in participating hospitals concerning the usefulness of the recently introduced Quarterly Hospital Information System, provided valuable comments for improvements in the system, many of which will be incorporated in the revised 1972 version. The availability of two years of quarterly data has enabled certain comparisons and trend analyses. Edit observations in English and French are available to reporting hospitals to indicate problem areas in the hospital's quarterly forms. A special analytical programme was introduced for pediatric hospitals in the last quarter of 1970.

The groundwork has been laid for the computerized production of the annual List of Canadian Hospitals and Related Institutions and Facilities. This design work will soon allow for the production of a number of comprehensive listings covering major groups in the health care delivery system and will expand in the future to cover Nursing Homes, Welfare Institutions, Welfare and other health related facilities.

Preliminary plans have been made to expand the annual surveys of health manpower. These programmes are being designed in consultation with the Departments of National Health and Welfare and Manpower and Immigration, the provincial government departments and other concerned agencies. The reports produced in this series will be released in 1971 and will contain data based upon geographic location, type of employment and educational qualifications. An occasional series composed of twelve reports, giving data for thirteen health manpower occupational groups will be finalized in late 1971. The series has been designed to show trends in each province during 1961-68 in employment patterns, turnover rates and other related areas. The Annual Survey of Registered Nurses will be available in April 1971.

Judicial Division

The principal objective of the Judicial Division is to measure the effectiveness of the judicial process; that is, law enforcement, judicial procedure and rehabilitative services. The new programmes stress the reduction of the respondents' work load by devising reporting systems based on either "administrative-statistical" or "legal-statistical" forms which provide complete and accurate operational data, numerous means for returning to respondent information for administrative or social research, and the integration of statistical series within provinces.

Detailed discussions have taken place with representatives from the province of Ontario and from the Northwest Territories who are interested in a complete revision of their court reporting systems. Similarly, DBS is studying the implications of obtaining detailed data on the use of bail and summonses at the expressed request of the Minister of Justice. The request of the Solicitor General's Department for an integrated statistical system has produced interest in several provinces to adopt the model juvenile court statistics programme now employed in Manitoba. Arrangements have been made to implement a new Prison/Reporting Programme in Nova Scotia during the next fiscal year.

The Royal Canadian Mounted Police and DBS are considering the possibility of automating their statistical programme for crime reporting. The Police Records Manual, prepared at the request of the Canadian Association of Chiefs of Police, was distributed to police departments as a guideline to ensure better statistical reporting under the Uniform Crime Reporting Programme. As a result of the Uniform Crime Reporting Programme, investigations are under way to extend RCMP jurisdiction for reporting narcotic offences to the police departments.

Seminars were held at Zone Meetings of Chiefs of Police in Ontario where the UCR system was discussed and explained in detail and related problems were identified and resolved. The seminar has proven to be a most effective way to communicate with respondents and accommodate the specific requirements of separate provinces. Efforts are continually being made to increase the liaison with the provinces and the Judicial Division has begun the first phase of an internal training programme designed so that each field liaison officer may effectively cover the three areas of the Police, Courts and Corrections.

Provincial Liaison and Consultative Services Staff

The Provincial Liaison and Consultative Services Staff co-ordinates and initiates the Bureau's contact with provincial government departments, particularly in the former's capacity as producers and users of statistics and responds to provincial requests for general or specific assistance in the statistical field. Secondly, the staff co-ordinates requests for data on travel, tourism and outdoor recreation through the co-operation of several divisions in DBS.

Provincial Liaison Activities: A major responsibility of the staff is to act as a focal point to improve and extend federal-provincial communication in the statistical field. This year saw the appointment of the first two professionally qualified liaison officers to Halifax and Edmonton. Following frequent and regular requests for provincial statistical series, an advanced information system has been developed by the headquarters' staff, in co-operation with subject-matter Divisions, in order to provide interested provincial officers with required statistical series as soon as they become available in DBS.

Again this year, all provinces were visited by members of the Staff and a variety of general consultative and liaison services were provided through bilateral meetings. The Seventh Federal-Provincial Conference on Economic Statistics held in Banff, Alberta, May 19-23, 1970, attended by over 100 delegates, was a major undertaking for the staff, which acted as this Conference's secretariat. A Summary Report, including the Conference Resolutions, has been issued.

During the year, the staff continued its extensive review of the more than 700 co-operative agreements with the provinces. Additionally, the staff has begun to document statistical or administrative data series produced by provincial departments. The staff is involved in a wide variety of internal DBS activities which concern policies and programmes affecting the provinces. In addition, the staff continues to inform DBS officials of provincial policies and programmes.

Travel, Tourism and Outdoor Recreational Statistics: The staff represents the Bureau on various committees concerned with travel statistics and research. It is the secretariat for the Travel Research Planning Committee and its Technical Sub-committee of the Federal-Provincial Conference on Tourism.

A review was conducted of a consultant's report commissioned by DBS in 1967, which has been distributed to the interested federal departments and directors of DBS. Following this, a report was prepared containing recommendations for the future role of the staff for the collection and dissemination of data on travel, tourism and outdoor recreation.

A new annual publication is being prepared which will contain an outline of the data produced in DBS on travel, tourism and outdoor recreation. In its second edition, this report is scheduled to contain a section on domestic travel to be derived from the 1971 Canadian Travel Survey. This is a major household survey being conducted by DBS on behalf of the Office of Tourism. Both the provinces and DBS hope to obtain special information on international travel by Canadians which can be related to other international travel statistics produced in the Bureau. The staff is also continuing to participate in the planning of a number of interview surveys of tourists from the United States.

The staff participated in the Federal-Provincial Conference on Tourism and in all meetings of its Technical Sub-committee, in the annual meeting of the Travel Industry Association of Canada (formerly the Canadian Tourist Association), and in the first annual meeting of the Travel Research Association (incorporating the Eastern and Western Councils on Travel Research).

The Co-ordinator was also extensively involved in a variety of preparatory activities which led to passage of a new Statistics Act.

Field Division

This Division is responsible for all field survey activities of the Dominion Bureau of Statistics. It administers eight Regional Offices located in St. John's, Halifax, Montreal, Ottawa, Toronto, Winnipeg, Edmonton and Vancouver. These offices have a variety of functions including the conduct of the Censuses of Population and Agriculture, the monthly Labour Force Surveys with their associated supplements and Special Surveys, the monthly pricing of Commodities and Services for the Consumer Price Index, a continuing Job Vacancy Survey, and numerous special projects. These offices also provide service to other DBS Divisions by collecting a variety of reports from local business establishments. They foster and promote the fullest use of the DBS statistics by providing a local reference library

and by giving assistance to users in satisfying their statistical needs.

Preparations have continued for the Tenth Decennial Census which will be conducted in 1971. The Field Division is responsible for the task of enumerating approximately 21.6 million people scattered across 3 1/2 million square miles for the census.

Regional Census Offices of the Field Division instructed approximately 135 Regional Office Representatives located across Canada. They, in turn, will instruct approximately 2,000 Census Commissioners. The Census Commissioners will select and train about 42,000 Census Representatives. In addition, technical training will be given to over 3,000 temporary personnel employed in the Regional Offices and in Head Office to process the census documents through a number of methodological and quality checks. Regional processing offices will be closed by the end of October.

One of Canada's most important economic indicators is provided by the monthly Labour Force Survey, which compiles the official employment figures for Canada. This survey employs some 750 part-time interviewers who obtain information each month from a sample of over 30,000 households, scientifically selected to represent all geographic and economic regions across the country. Questions on labour force activity are asked each month and the resulting monthly bulletin "The Labour Force" presents details of employment and unemployment for Canada, and for each of the 5 regions of the country.

In conjunction with these monthly surveys, supplementary questions are included to obtain limited information relating to other matters of current interest. During the 1970-71 fiscal year, these questions dealt with such subjects as student employment, smoking habits, weeks worked, immigration, paid absence from work, movement of persons within Canada and multiple job holdings. Special questionnaires are also used where more extensive detail is required; e.g., the annual Household Facilities and Equipment Survey in May and the monthly Rent Survey which is regularly conducted with the Labour Force Survey. These surveys are conducted for other divisions within DBS and for other federal government departments.

Apart from the supplementary and special surveys conducted directly with the Labour Force Survey, special surveys which use the Labour Force Survey sample are conducted separately. The National Food Expenditure Survey of about 1,200 households per month was continued to the end of 1970. The Family Expenditure Survey of 22,000 households was carried out with over 600 interviewers participating.

In order to obtain complete records on family income, assets, and indebtedness, the Consumer Finance Survey based on a sample of 12,000 households commenced in late April 1970. Together, these Family Expenditure and Consumer Finance Surveys provided the most comprehensive record of family income, expenditure patterns, assets and debts ever compiled by the Dominion Bureau of Statistics.

Price collection for the Consumer Price Index is an important Regional Office activity. Retail prices for some 300 commodities and services are collected monthly in 34 cities across the country. Over the past year, separate indexes have been made available for Thunder Bay and Quebec City. Pricing is being done for next year's revision of the CPI and for improved representation of chain and independent food outlets.

The Field Division has done work for the Comparative Living Costs Section for St. John's (Nfld.), Saint John (N.B.) and Halifax Fuel Costs and Public Utility rates have been studied as well as retail prices of cigarettes and tobacco.

A substantial increase in ad hoc pricing is expected in 1971-72 which will place irregular demands of time and scope on the Field Division's resources.

Further pricing is expected for the Industrial Prices Section in connection with their Tract Housing Survey. Indexes are to be constructed for selling prices of new homes on a national and regional basis to show changes required in financing and investment policies.

The Current Business Surveys Section of the Field Division is responsible for the timely collection of business reports from

non-response firms. These reports, which in some cases account for up to 30% of the universe, are collected for almost all subject-matter Divisions of the Bureau.

A pilot study was conducted this year for a "Trucking Origin and Destination" Survey which commences April 1971. This survey will engage the Field Staff in an elaborate selection procedure for sampling the mass of records of trucking firms.

During the past year, the Job Vacancy Survey achieved full coverage of all economic sectors, with the exception of Agriculture. Thirty-four thousand questionnaires were mailed out on a bi-monthly basis. Through a combination of personal visits and telephone contacts, the field force of 50 interviewers carried out approximately 4,000 interviews per month.

During the year, the Field Division also conducted work on special projects, notably the Canadian Travel Survey and the Nutrition Canada Survey.

The Canadian Travel Survey consists of interviewing approximately 12,800 households representing both urban and rural areas within the 10 provinces of Canada. The Survey began in March 1971 and will be completed in January 1972. The results will provide statistical information on the travel habits of Canadians which will be useful to the provinces and the Federal government, and will aid in developing tourist resources.

The Nutrition Canada Survey will involve the interviewing and clinical examination of 21,000 Canadians between September 1970 and September 1972. The results of this survey will help to evaluate the need for new food legislation, changes in food composition controls, and revisions in nutritional education.

ADMINISTRATION BRANCH

As a result of a reorganization effected during the year, the Bureau's Financial and Administrative Services were brought together with Personnel Administration to form the Administration Branch. The Director General was given over-all responsibility for administration, finance, personnel, the bilingual programme and management services. A review of the services provided to the Bureau by various parts of the Branch follows.

Personnel Administration

Staffing - Some easing of the recruiting situation became apparent as the year

progressed, with a greater supply of qualified candidates available for professional and technical needs. The proportion of bilingual people recruited to the officer categories was improved. Staffing services were rendered more flexible and effective through (a) acceptance of delegated staffing authority for the Administrative and Foreign Service Category, and (b) adoption of selection processes alternative to the formally advertised competition, namely, Data Stream and in-house Manpower Inventory searches.

Special efforts were directed towards the training of regional managers in the practice of the newly sub-delegated staffing function, through both the preparation of

manuals and through personal instruction. Another notable activity was the planning and preparation of a programme for the staffing of the Regional and Head Offices of the 1971 Census with a requirement of 4,000 or more casuals.

Permanent employees hired during the year numbered 490 of whom 95 were statisticians. Term employees hired numbered 1,047. Of the total separations of 1,136, 337 were continuous employees (of which 64 were statisticians), and 799 were term employees.

Employees on staff at the end of the year numbered 3,303 continuing (permanent), and 757 term.

The services of 406 students were utilized during the summer: 39 as research assistants and 367 in a clerical capacity.

During the year 643 employees were promoted. Competitions open to the public were held in 47 other cases.

Appeals lodged numbered 18: of which 10 were against internal competitions, one against an interdepartmental competition, and 6 against recommendations for promotion without competition. Of these, 10 were dismissed, 8 were allowed.

Classification - To facilitate control and to improve service to line managers, an organization was introduced whereby each of the five officers of the section was made directly responsible for all classification requirements relating to a particular category in DBS as a whole.

A total of 1,885 position classification reviews were carried out in a total of 6,908 positions. More extensive study and analysis was required in reaching classification decisions to ensure validity and consistency in relation to effects of changes on existing functions and positions within each organization.

Classification grievances were of a normal nature with a total of six received and resolved. Of these, one was handled under delegated authority: five were submitted to the Treasury Board Review Group.

As the classification training courses of previous years had culminated in a bank of knowledgeable officers within DBS divisions and branches to be utilized on the evaluation process, the current need for classification training was somewhat diminished.

Preliminary studies were carried out on the policies, procedures and internal audit requirements involved in the anticipa-

ted delegation of classification functions to the Branches.

Development and Training - This Section continued expanding in all phases of the training of DBS employees during the fiscal year 1970-71.

Ever-increasing demands for EDP training, in keeping with this Department's move to automation, absorbed some 50% of the over-all training effort. There were 24 types of EDP courses conducted from which 491 employees graduated. These courses were given to systems analysts, programmers, subject-matter specialists and their support staff in all occupational groups. This represented a 100% increase over EDP training during 1969-70 and was accomplished without any significant increase in training staff by presenting most of these courses on video tapes.

In the area of supervisory and management training 116 selected employees were given training in effective supervision and management principles and techniques. This represented a 35% increase in graduates of these courses over the previous year.

With respect to professional staff, 40 graduated from in-house courses in Algebra and Analysis, Calculus, Sampling Theory and Econometrics.

Nine employees under the long-term educational leave programme pursued studies for post-graduate degrees aided by departmental grants totalling \$60,000. Another \$10,000 was devoted to 200 employees who took a wide variety of evening and correspondence courses, in many subjects, to improve their on-the-job performance.

The Section also organized special training for 14 foreign-aid students referred to DBS by the Canadian International Development Agency.

To upgrade the performance of clerical and technical officer staff, courses were presented in statistics and accounting at the introductory level. There were 74 employee graduates from this series compared to 30 in 1969-70.

All courses and programmes came in for extensive revision and improvement as the year progressed. The training staff acted as consultants to line management and much of this revision and improvement resulted from committee work at both the management and staff levels. Demands for VTR and audio-visual presentations of all types necessitated the establishment of an educational media technologist and this area of training expertise will be heavily emphasized in 1971-72.

Manpower Planning and Utilization - A comprehensive employee evaluation programme covering some 1,300 employees in the Scientific and Professional, Administrative and Foreign Service and Technical categories was implemented during the year.

A manpower inventory system, containing both qualitative and quantitative data on all employees in the Scientific and Professional, Administrative and Foreign Service, and Technical categories, was established in support of the staffing and manpower planning activities.

A detailed analysis of the DBS work force was completed as a preliminary step to development of an annual manpower plan covering recruitment, selection and staff development in DBS.

A system for capturing and maintaining detailed information on staff turnover and recruitment was introduced and the first annual analysis of the data completed.

Departmental manpower strength and utilization data is now produced from the Personnel Data System without external inputs. The system meets both the departmental and the new Treasury Board requirements for the exercise of manpower controls.

Staff Relations - Collective Agreements now cover 16 occupational groups in DBS, three are in the Professional and Scientific Category, two in the Technical, five in the Administrative and Foreign Service, four in the Administrative Support, and two in the Operational Category. The Section's advisory and monitoring role with respect to interpretation of the agreements, resolution of complaints and grievances, and discipline continues.

Staff Services - During the year the Government, as an employer, introduced the Disability Insurance Plan, and the Staff Services Section worked with the Superannuation Branch of the Department of Supplies and Services in administering it within DBS. A new procedure on pay and attendance was prepared relating to the casual clerks to be hired for the 1971 Census. Several meetings were organized with the Census Division and the Regional Representatives to explain this procedure. Five collective bargaining agreements affecting the Bureau staff were implemented; and salary revisions were paid accordingly.

Incentive Awards - There were 47 suggestions carried over from the 1969-70 fiscal year, of which 23 were rejected during the year. Fourteen of these received approval and granted awards valued at \$1,819.95, one

received a second-year saving award valued at \$848.64. Two of these suggestions are awaiting implementation and eight are still being investigated. During the year 18 new suggestions were received of which 12 have been rejected, one has been approved, and five are still being investigated. The Dominion Statistician made 25-year Long Service Awards to 211 DBS employees.

Bilingual Development

Progress towards management objectives in respect to bilingual development dealt primarily with resources on hand. An inventory of the language capacities of current staff was instituted through the development and administration of a second language standard evaluation test. Of 800 employees tested during the year, 500 proved to be, in fact, bilingual. Approximately 600 employees who claimed some knowledge of both official languages remained to be tested at the end of the year.

Many employees who were undergoing intensive language training were compelled to withdraw from the programme because of requirements related to the taking of the 1971 Census. Nonetheless, 219 employees were given training in the French language, and 21 in English.

Two monitors provided tutorial lessons to course participants at the rate of two hours per week for each group.

In addition to the testing, the training, and the tutorials, a nomination was made to the Secretary of State that four organizational units in the Bureau be converted to French language working units.

Management Consulting Services

The Section provides an internal consulting service to assist Bureau managers in the identification, analysis and solution of organizational and methods problems, and in the planning and development of new or improved systems. During the year, the Section carried out a variety of projects throughout the Bureau.

Assistance provided to the Census Division included: development of the framework for an over-all information storage and retrieval system; analysis of special requests for census information and development of a unique retrieval system; and development of an automated system for controlling the master printing schedule for

1971 Census documents. At the end of the year, preparations were being completed for conducting a process measurement study during both the actual census-taking in June and the subsequent manual processing. The results of this study will assist in preparing estimates for use in planning future censuses.

Several projects were carried out for the Field Division. A combined financial control and project control system was developed for the Regional Offices. A study is being carried out on data collection by Field Representatives to develop consistent time allowances for this work. (This study is separate from the census study because the statistical surveys in this area are repetitive and data are collected by direct enumeration.) A feasibility study was also undertaken to evaluate facsimile data transmission between the Regional Offices and Ottawa. A pilot installation is now under intensive testing prior to full-scale implementation.

One of the many potential uses of this facsimile installation is the simultaneous release by the Information Division of the DBS Daily Bulletin in major cities across the country.

A study was carried out in the Education Division covering the planning, scheduling and controlling of work procedures in the Division. At the end of the year, a comprehensive progress monitoring and control system was being installed.

A study of the function and organization of the Administration Branch was carried out in the latter half of the year. A number of recommendations arising out of the study were being implemented at the close of the year.

A study of the Bureau's policy and practice regarding free distribution of statistical publications was completed during the year, and many of the recommendations in the Report were being implemented.

A study was begun of the systems and procedures used in the Retail Prices Section to produce the Consumer Price Index. The purpose of this study is to improve the manual system as a first step toward increased automation.

A study was completed covering the internal distribution of mail with a view to taking best advantage of the new postal codes when these are introduced in the spring of 1971.

During the last half of the year, the Section was actively participating with the Bureau of Management Consulting to determine the feasibility of a Production Management function in the Bureau. A pilot system was being tested at the end of the year.

A number of other projects were also undertaken, primarily in the area of providing administrative skills and advice on a short-term or ad hoc basis on a wide range of subjects.

Financial and Administrative Services

As the result of a reorganization which took place during the year, Financial Services, Office Services, Management Progress Reporting and Cost Accounting System (PRACAS) and Records Management were grouped together to form Financial and Administrative Services.

Functions of the Financial Services Section are performed by the Financial and Publications Distribution Units. The Financial Unit is responsible for the over-all financial operations of the Bureau, including the co-ordination of the Programme Review and Main Estimates and the supply of financial management information. The Unit examines and controls expenditures, audits travel claims and commercial accounts, interprets financial regulations and advises line managers on financial matters. Having accepted responsibility for full pre-audit, allotment and commitment control during 1969-70, a commitment control system utilizing a bookkeeping machine and computer records has been designed and implemented. Also during 1970-71 a Revolving Fund operation was initiated. The Fund is used to reimburse the Bureau's operating budget, both funds and man-years, for expenditures incurred on special ad hoc statistical work performed at the request of users. The Publications Distribution Unit is responsible for the sale and distribution of DBS publications and maintains current mailing lists for distribution of publications and subscription statistical reports. During the fiscal year 2,108,189 pieces of mail were dispatched and 63,259 mail orders were received. The subscription mailing list is currently made up of 232,426 addressograph mailing plates.

The Office Services Section continued to provide the essential services of accommodation, stationary and supplies, purchasing, telecommunication, drafting, forms management, stenographic pools, duplicating, printing, addressing, and mail. Among the major accomplishments during the year was

the planning and provision of approximately 130,000 square feet of office space for the 1971 Census of which more than one-third was special purpose space for the processing of census returns. The design and production of census forms and the continuation of the conversion to bilingual publications, forms and questionnaires continued throughout the year. The Section administered over 500,000 square feet of office space in four buildings, provided service to over 1,400 telephones, addressed approximately 15,000,000 mailing pieces and dispatched over 31,000 bags of mail.

During the 1970-71 fiscal year work continued on the development of a Bureau information system to meet the needs of the various levels of management. Known as "PRACAS" it is a multiproject cost control system that has the capability to accommodate projects which range in size from a few thousand dollars to several millions, in duration from a few weeks to many months and in technical complexity from straightforward production to advanced research and development projects. At present over 650 projects which represent the Bureau's full programme of social and economic statistics have been identified. PRACAS is automated and features a graphed project

status report which provides monthly data on the utilization of resources such as man-years, funds and associated costs in relation to planned objectives and progress achieved. Through the use of the System an environment is being created for the development of project managers who will assume the responsibility of controlling cost and progress of complex undertakings from research and development stages through to publication.

The Records Management Section has made steady progress in its programme to install and operate standard filing systems in all divisions of the Bureau. Abbreviated surveys were completed of the records keeping procedures in use in all areas of the Bureau and an estimate made of the probable cost to each responsibility centre. Assistance was given in the production of guidelines for scheduling statistical records, i.e., the establishment of retention periods and eventual disposal of all records. Several file classification systems were developed for specialized areas which are now in operation. Detailed studies were completed and reports also prepared containing recommendations for improved records operations in several branches of the Bureau.

DOMINION BUREAU OF STATISTICS SENIOR OFFICERS

(As of March 31, 1971)

Dominion Statistician Walter E. Duffett

Assistant Dominion Statistician (Integration
and Development) S.A. Goldberg

Assistant Dominion Statistician
(General Assignments) H.L. Allen

Assistant Dominion Statistician (Socio-
Economic Statistics Branch) L.E. Rowebottom

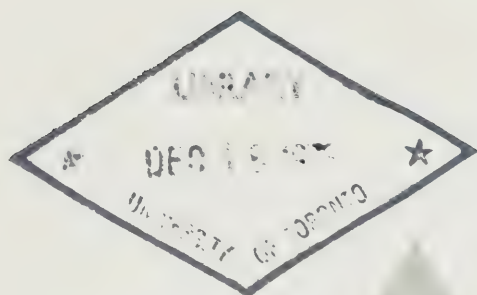
Director General (Economic
Accounts Branch) E.B. Carty

Director General (Economic Statistics
Branch) V.R. Berlinguette

Director General (Financial Statistics
Branch) G.A. Wagdin

Director General (Methodology and
Systems Branch) I.P. Fellegi

Director General (Administration) G.R. Labossière



**Annual Report
of Statistics Canada**

for the fiscal year
ended March 31, 1972

1-0000-502 Catalogue 11-201
December 1972
Information Canada,
Ottawa

Table of Contents

	Page
Highlights	5
Organization Chart	6
 Part 1: The Data-Producing Groups	
Economic Accounts Branch	7
Balance of Payments and Financial Flows Division	7
National Income and Expenditure Division	7
National Output and Productivity Division	7
General Time Series Staff	8
Economic Statistics Branch	9
External Trade Division	9
Input-Output Research and Development Staff	9
Labour Division	9
Manufacturing and Primary Industries Division	10
Merchandising and Services Division	10
Prices Division	10
Transportation and Public Utilities Division	11
Financial Statistics Branch	13
Business Finance Division	13
CALURA Division	13
Governments Division	14
Socio-Economic Statistics Branch	15
Agriculture Division	15
Census Division	15
Consumer Finance Research Staff	15
Education Division	16
Field Division	16
Health and Welfare Division	16
Judicial Division	17
Provincial Liaison and Consultative Services	17
 Part 2: The Central Management and Service Groups	
Integration and Development Staffs	19
Central Classification and Company-Establishment Integration Staff	19
Central Planning Staff	19
Consultant on Demographic Research	19
Econometric Research Staff	19
Regional Statistics Staff	20
Senior Advisor on Integration	20
Methodology and Systems Branch	21
Computer Systems Development Division	21
Economic and Financial Survey Methods Staff	21
Socio-Economic Survey Methods Staff	21
Special Surveys Development Staff	22
Statistics Use and Information Services	23
Information Division	23
Library	23
Statistics Use Development	23
Year Book Division	23
Administration Branch	25
Advisor on Bilingualism	25
Financial and Administrative Services	25
Management Consulting Services	25
Personnel Administration	25
Data Processing Division	25

Foreword

The organization of the central statistical function in a modern industrialized nation is necessarily complex and subject to periodic revision as statistical demands and methods change.

A separate department of government since 1966, Statistics Canada* is headed by the Chief Statistician of Canada, assisted by three Assistant Chief Statisticians.

In the fiscal year 1971-72, the bureau's organization consisted of five bureau-wide central management and service groups and four large subject-matter branches comprised of 21 divisions, each responsible for a broad subject-matter area.

For ease of reference, this report is divided into two parts. Part I reviews the output of the subject-matter branches; Part II deals with the work of the management and service groups.

** The bureau, previously known as the Dominion Bureau of Statistics, officially became known as Statistics Canada by virtue of the Statistics Act (SC 1971, Ch. 15) assented to February 11, 1971. Implementation of the new name was delayed until August, 1971 to avoid confusion in the public's mind in that 1971 Census documents bore the previous name.*

Highlights

The National Statistical System 1971-72

The fiscal year ended March 31, 1972 was a highly significant one in the 54 years of development of a centralized national statistical system in Canada:

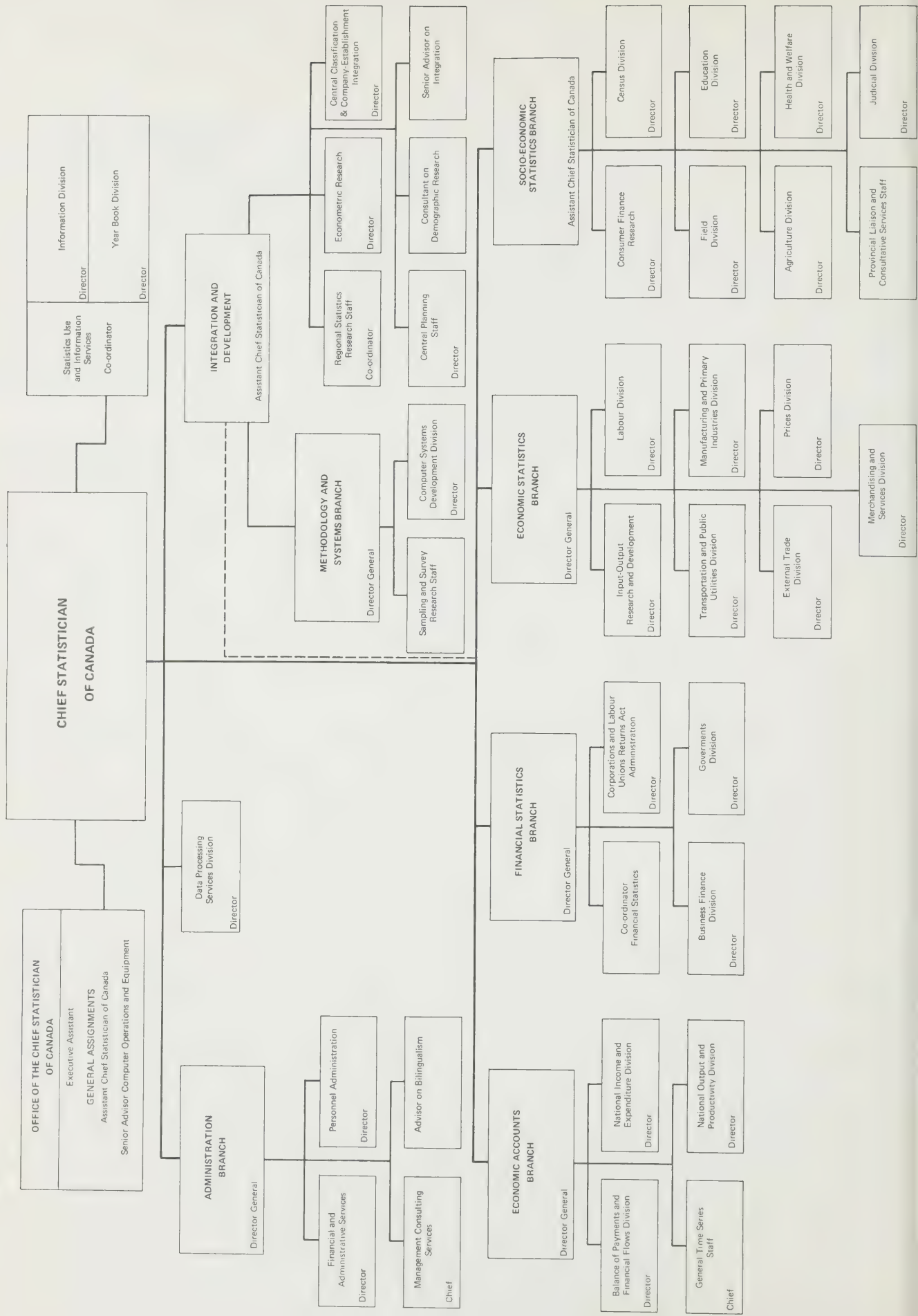
- A new Statistics Act (SC 1971, Ch. 15) was promulgated.
- Assented to February 11, 1971, and proclaimed May 2, 1971, it significantly reinforced the authority of the Dominion Bureau of Statistics (thenceforward to be known as Statistics Canada) as the core authority in the national statistical system.
- The Act also provided firmer legislative authority by which provincial statistical agencies could co-ordinate and integrate their activities with those of Statistics Canada.
- The Act further gave authority by which Statistics Canada could gain access to the administrative records of other federal government departments (notably, access to National Revenue, Taxation income tax data) in order both to strengthen Statistics Canada data bases and to relieve the private sector of a number of dual reporting requirements.

The year was also historic in that in this eleventh decennial census year, for the first time, a process of self-enumeration was used for collecting data from all but that three percent of the population located in remote areas and institutions.

It was also a year in which much greater effort was put into:

- Optimum use of computer capabilities.
- Expansion of compilation and availability of small-area data.
- Investigations into the practicability of a series of social and environmental indicators.
- Development of a more dynamic role by the bureau in liaison with users and potential users of bureau data and in the publishing role in an active rather than within a responsive framework.

The pages which follow review administrative organization of the bureau and report on main accomplishments in 1971-72.



Part 1: The Data-Producing Groups

Economic Accounts Branch

This Branch is primarily responsible for principal statements and indicators relating to the economy storage, retrieval and dissemination of data (CANSIM, the Canadian Socio-Economic Information Management System). The scope of the Branch's activities thus extends over the whole of Statistics Canada's output and beyond, providing an integrated set of

macro-economic data for the use of economists and others concerned with the course of the economy.

**Balance of Payments and
Financial Flows Division**

**National Income and
Expenditure Division**

**National Output and
Productivity Division**

General Time Series Staff

**Director General:
E. Bower Carty**

Balance of Payments and Financial Flows Division

This division is responsible for the construction, analysis and publication of data related to:

- Estimates of balance of payments covering capital and current transactions between Canada and other countries.
- Canada's international investment position, its external assets and liabilities.
- Financial flow accounts integrating the financial activities of the Canadian economy into a single statistical framework and recording the flow of funds between various sectors.
- International travel, covering both Canadians travelling abroad and non-resident visitors to Canada.

In international investment activities during the year a major report was published updating, revising and extending data on Canada's international investment position for 1926 to 1969 with broad aggregate measures up to 1969. It also examined borrowing and lending relationships.

On the balance of payments side, results of a special survey covering underlying payments and receipts for business services and all other

countries was published in the third-quarter 1971 Balance of Payments report.

An automated system for financial flows data was well advanced in the year; early release of key figures was introduced experimentally.

Compilations of international travel data were revised using new forms, a centralized processing system and limited sampling at major entry points.

Close contact was maintained with United States business economics officials to explore reasons for inconsistencies between data collected in the two countries. Within Canada, a joint survey with External Trade Division was launched to determine valuation practices on imports and exports.

Senior divisional staff continued to maintain international contacts through meetings of such bodies as the OECD, IMF and UN committees.

National Income and Expenditure Division

Preparation and publication work on the National Income and Expenditure Accounts reports during the year included further revisions to the detailed historical series 1926 to 1968 which had been made available earlier in preliminary form on computer printouts.

Revisions took into account 1966 Census of Merchandising results, newer data on labour income and other components.

Improved methodology was introduced in several major series in later phases of an over-all revision program back to 1947.

The timeliness pattern of the quarterly accounts introduced in 1970 was maintained in 1971.

National Output and Productivity Division

This Division publishes monthly, quarterly and annual indexes of Real Domestic Product, its major components such as the Index of Industrial Production and for a large number of individual industries. Over 120 indexes are published each month; considerably more detail is available annually.

Revisions for 1968 to 1971 were published in August, 1971 and publication was continued of current-dollar value-added data annually for the goods-producing industries by province.

Research programs included pilot studies of output, input and productivity for selected components of non-commercial industries; the development of gross output indexes; and preparation of reference documents on concepts, methods and sources.

Progress was made in development aimed at producing quarterly productivity and annual unit labour cost measures.

In detailed productivity studies by industry, reports produced during the year covered the petroleum refineries, cement manufacturers and sugar refineries. By year's end preparation of reports was in progress covering manufacturers of radios and TVs and a number of food and beverage-producing industries. Work had also reached an advanced stage in development of productivity estimates for all major manufacturing groups.

General Time Series Staff

This Staff is engaged in three main activities:

- Development, implementation and management of CANSIM (the bureau's computerized time series data bank).
- Applied research and development in seasonal adjustment and other smoothing techniques for time series analysis.
- Publication of the monthly Canadian Statistical Review and its supplements.

Research into alternative seasonal adjustment methods was accelerated during the year.

On CANSIM itself, interest increased substantially; the sale of the Canadian Statistical

Review tape more than doubled; operational efficiency increased significantly with introduction of an improved retrieval package.

CANSIM documents were distributed to approximately 40 universities across Canada; seminars were held at the Universities of Manitoba and New Brunswick in which both the university community and provincial government representatives participated.

Arrangements were made for transfer of the CANSIM data base and system programs to the Federal Computer Services Bureau, with access initially limited to government agencies.

Representatives of the National Central Bureau of Statistics visited CANSIM officials for assistance in developing in a SWESIM base.

Economic Statistics Branch

This Branch produces statistics relating to the major industrial sectors of the economy, primary industries (except agriculture), transportation and public utilities. Collections are derived from establishments within companies (production, sales and service units) by means of hundreds of monthly, quarterly and annual mail surveys and some enumeration-type surveys. Data are also derived from administrative records. In general, output of this Branch tends to concentrate on data related to production or sales of commodities or services, materials used, employment, prices and imports and exports.

External Trade Division
Input-Output Research and Development
Labour Division
Manufacturing and Primary
Industries Division
Merchandising and Services Division
Prices Division
Transportation and Public
Utilities Division

Director-General
V.R. Berlinguette

External Trade Division

In its program of producing data on Canada's foreign trade, this Division issues monthly, quarterly and annual reports on exports and imports in a variety of significant tabulations and cross-tabulations. It also provides, at cost, a series of special tabulations.

During 1971-72, work was started, and was halfway complete at year-end, on a joint automation project with the Department of National Revenue, Customs and Excise, on import data. Work also started on a parallel system on exports. Through these efforts, users were provided with greatly enhanced data combinations; specialized data arrangements were provided to the Department of Finance, the Bank of Canada and Air Canada. Other government agencies and industrial users also expressed interest.

A noteworthy development in the year was production of a Canadian International Trade Classification Commodity Index – an integral feature of the automation project. The new index enables the Division to collect import data in finer detail and assists DNR to refine parameters for computerized editing. The new index has been so designed that it can later be applied to exports as well as imports; it identifies 15,000 separate commodities in Canada's international trade.

Another major project in 1971-72 was initiation of a joint program with the U.S. Department of Commerce to identify and reconcile the wide gaps which have existed in methods of measuring import-export trade between the two countries. To this end a U.S.-Canadian Trade Statistics Committee was formed, headed jointly by the U.S. Secretary for Economic Affairs and the Chief Statistician of Canada.

Among the problems to be examined by the Committee were under-reporting and conceptual and valuation differences, means for attaching a quantitative weight to each and location and assessment of those parts of the commodity universe where discrepancies seem to occur most frequently and in greatest size.

With both countries now using computerized facilities for systematic comparisons of data, the feasibility of reconciliation of the two sets of data now seems nearer resolution.

Input-Output Research and Development Staff

Considerable progress was made in 1971-72 on continuing projects of the Input-Output Research and Development Staff. Among them were estimates of consumer expenditures on goods and services from 1947 to 1970 for the National Income and Expenditure Accounts.

This project had two significant implications for the construction of annual input-output tables. Reconciliation between Income and Expenditure Accounts and Input-Output Tables has been greatly facilitated but the completion of annual tables for the years 1962-67 was delayed.

In analytical and customer services, a number of accomplishments can be reported. Both the output and price models were widely used by a variety of public and private agencies. More than 200 successful simulations were performed on the output model for 20 different agencies. The price model was used for 50 simulations by four agencies. Several improvements were made to the models, the most important of which was the development of an output model closed with respect to consumer expenditures.

New methodology was developed and tested on a small-scale model developed in the computer language, APL. This methodology is concerned with the introduction of capacity constraints on levels of activity in the output model and the linking of the price and output models.

The Input-Output Staff continued to participate actively in the construction of the CANDIDE model, an interdepartmental project whose members include the Economic Council of Canada, the Departments of Regional Economic Expansion, Manpower and Immigration, Finance, the Bank of Canada and Statistics Canada. A first version, known as CANDIDE Model I, an annual, medium-term, econometric model, was completed early in 1972.

Labour Division

Statistics of the labour force, employment, unemployment, labour income, employer labour cost, occupational employment, and job

vacancies, pension plans and data on the operations of the Unemployment Insurance Commission and Canada Manpower Centres of the Department of Manpower and Immigration all come under this Division's purview.

During the year, a new system for processing the larger-firm employment and pay-rolls survey, including sophisticated computer editing routines, was introduced. The new system provides additional data for salaried employees and all wage-earners and, when its full potential is exploited, should result in improvements in the speed with which current data can be produced.

A new system has also been successfully introduced for the production of small establishment employment estimates.

Following publication in 1970-71 of the results of a comprehensive survey of selected employer labour costs, similar surveys were planned to obtain data on the components of the wage package in other industries on a rotational basis. Thus, the 1971 survey covered the finance, insurance and real estate, and transportation, communications and other utilities industries. The 1972 survey covered the manufacturing industry again and, for the first time, forestry.

For an annual survey of earnings and hours in the manufacturing industry which produced separate data for female employees – the only source of current female earnings data in Canada – plans were made for collecting similar data for other industries, particularly in the service sector.

Highlights of other activities:

- With the Unemployment Insurance Act, 1971, making coverage universal for paid workers, plans were developed for a program to provide statistics on the operations of the Commission under the new Act.
- A new computerized pension information system was developed to provide a current, constantly updated record of the terms, conditions, membership and contributions of some 85 per cent of all occupational pension plans in Canada. This new program represents a major breakthrough in pension data systems and was made possible through the co-operation of the pension authorities of

Quebec, Ontario, Saskatchewan and Alberta as well as the federal Department of Insurance. Their resources were mobilized into a single co-operative system for the collection, assembly and production of statistical information using administrative records as the data source. A specially designed retrieval system provides fast, flexible access to the data file.

The first Report on Job Vacancies was published in December, 1971, providing new information on the unfilled demand for labour in the form of quarterly estimates of job vacancies classified by occupation, region and industry.

The Labour Force Survey Section substantially expanded its monthly publication *The Labour Force* and reduced, by two full days, the time between collection and issue of information on the statistics. A special publication, *Fact-book on the Unemployed*, dealing with various aspects of unemployment in Canada was also produced.

Research activities in the Labour Division were considerably expanded during the year with transfer of the Special Manpower Staff from Integration and Development.

A number of research projects aimed at increasing understanding of labour market behaviour were undertaken, covering such topics as methods of job search, youth participation in the labour force, long hours (including overtime and multiple job holders) and composition of the unemployed.

Study and research were undertaken of the concepts used in the Labour Force Survey and possibilities for tightening the questionnaire for improved data quality were reviewed.

On the development side, exploratory work continued on the problems of producing estimates of occupational employment; a proposed Occupational Employment Survey was authorized toward the end of the year. Efforts to develop a national system of work-injury statistics continued in 1971-72.

Manufacturing and Primary Industries Division

Data on operations of all manufacturing industries and the forestry, fisheries and energy industries are produced by this Division.

During the year the division placed considerable emphasis on improving collections of data and the quality and timeliness of its output.

A joint study by the bureau and the Canadian Institute of Chartered Accountants initiated in the previous year resulted in a restructuring of the Census of Manufactures questionnaire which was tested on a wide range of multi-establishment companies.

A significant reduction in time taken to collect data in the annual census of manufactures was achieved with reductions of up to six weeks in some surveys. There was, however, some loss in timeliness in obtaining tabulations. More extensive use of a short-form questionnaire for small firms brought a reduction in the burden of response for such firms without significant data loss.

New computer capabilities enabled the division to respond more readily and rapidly to

small-area data needs and for advance publication purpose; these were applied to a major special request from DREE and to increasing timeliness of advance information generally.

Development of a standard industrial commodity classification neared completion at year-end; coding of the 1972 questionnaire for the four of five sections completed was implemented.

In new projects, significant items were a detailed study of the effects of alternative-enterprise concepts; the start of production of concentration ratios and related manufacturing industry data; extensive research of the stability of firms' market shares over time selected industries; and the analysis of growth patterns in manufacturing employment by counties and census divisions.

Merchandising and Services Division

Compilations of data on the retail, wholesale and service sectors and such related services as consumer credit are the main responsibilities of the division.

The main thrust of activity in 1971-72 consisted of finalization and implementation of plans for the 1971 Census of Merchandising and Service Businesses. A concept paper was prepared to ensure the validity of census results and to guide users in use of the data.

In the retail sector, a new monthly retail trade sample survey was developed. Work was also completed on the revision of monthly retail trade data for the three years ended December 31, 1971; these reflected births/deaths adjustments for 1969 and 1970 and a revision for 1971. A review of text formats to the monthly and annual retail trade reports was made; presentations of tabular material were revised.

On the wholesale side, further work was undertaken for the 1971 Census of Wholesale Trade. With this work as a priority, no survey was taken for 1970.

A new project for the division was initiation of a new national survey on diesel engine sales to replace similar provincial surveys taken by Quebec, Ontario, the Prairie Provinces and British Columbia.

A number of new projects were developed to enhance coverage in the services sector:

- updating the current publication program;
- planning for the 1971 Census;
- development of new surveys covering accommodations, franchising and food-serving industries; and
- redevelopment of a motion picture production and distribution program.

Also in the services sector, the hotel survey was expanded to include, for the first time, data on motels, tourist courts, cabins and other accommodations. Publication of results was in various stages of completion at year-end.

A new monthly sample of restaurant operations was introduced in January, 1971, to provide data, not previously available, on receipts of various types of restaurants including take-outs and industrial establishments.

The quality and utility of consumer credit statistics came under close scrutiny. In October, 1971 revised figures (adjusted to 1961 and 1966 census benchmark data) were published on department store credit outstanding and for furniture, TV, household appliance and "all other" retail categories.

In extension of credit statistics coverage, new data on car rental, transportation, travel and entertainment were added to the data covering oil (gasoline) companies. Another class of credit grantors - public utilities such as telephone, gas and electric power companies - also became subject to surveys.

Prices Division

This division collects data on retail prices and living costs and industrial prices. Measurements are made of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing statistics on family expenditure for various types of families.

In industrial prices, measurements are made of price movements in the production and distribution of commodities and services in which the primary focus is on the price of outputs and inputs of individual industries.

During 1971-72 a new *Retail Prices and Living Costs Service Bulletin* was inaugurated to provide timely release of information concerned with family expenditures, consumer prices, national and international living cost comparisons, special articles and tabulations which might not otherwise become available.

In consumer price indexes, work continued on updating the weighting patterns of the Canada and the regional city indexes, using 1967 family expenditure patterns and results of the 1969 food expenditure survey. Developmental work was also continued on a project aimed at production of publishable average retail prices for a range of precisely defined supermarket items. Separate studies were also initiated to improve the sample of retail outlets from which prices are collected for use in consumer price indexes.

Improvements and extensions of place-to-place comparative retail price measurements were continued and a study of retail price differentials between Prince Rupert and Vancouver was carried out under a joint cost-sharing arrangement. Progress was made on updating the 11-city study of intercity retail price differentials to eliminate gaps in earlier statistics for St. John's, Newfoundland, and Saint John, New Brunswick.

The number of isolated posts reviewed for retail price and living cost conditions was increased and results of surveys conducted at locations on the west coast of British Columbia, in the Yukon and Mackenzie River Region, at Frobisher and in Newfoundland, were analyzed.

Developmental work was continued on comparable family budgets using results of the 1969 national family expenditure survey program to provide a basis for measurement of place-to-place living-cost differentials. A project to derive intercity comparisons of rent levels was also in progress.

Continuing the Canadian Government's foreign service allowance system for expatriate civilian and military employees, full-scale retail-price and living-cost surveys for 38 foreign cities were analyzed. Abbreviated surveys were analyzed for another 14 locations. In addition, the results of previous comparative living-cost

studies for all locations where Canadian personnel are serving were reviewed and updated where warranted.

A survey of the shelter costs of military personnel serving in Europe was analyzed; a world-wide family expenditure survey of Canadian government personnel abroad, comprising returns from some 2,500 respondents, was completed and the results introduced into the design of index weighting patterns in the fall of 1971.

In family expenditure data, an all-Canada expenditure pattern for 1969 was published with sub-sets by regions, provinces and urbanization classes, marking a first in Canadian statistics, both in the scope of the survey and in its size and potential for analytical uses.

Development work during the year included the planning of two partial budget surveys, each focussing on a separate area of the budget and incorporating new methods. These surveys were carried out in eight regional urban centres. New detailed questions explored the use and cost of credit in consumer buying to improve information on interest and financing costs.

The second survey, which began in March 1972, was designed to collect data on detailed clothing purchases by means of two-month recall instead of the usual annual recall to improve quality and yield information on seasonal clothing purchases.

In industrial prices, publication of indexes of manufacturers' selling prices on a 1961=100 time base was augmented to a 100-industry series with inclusion of an index for the metal pressing, coating and stamping industry. Publication continued for 420 commodity price indexes in manufacturing. A gross-weighted total industry selling price index for manufacturing was published for the first time.

A major revision of the price index of commodities and services used by farm operations was completed in 1971 and revised indexes were released in September 1971 under a new title, *Farm Input Price Indexes*. An extensive program of presentations throughout Canada brought favourable acceptance of the new series. Total, group and a range of item price indexes are published quarterly for Eastern, Western and all Canada from 1961 on a 1961=100 base.

For the service industries, the development of price indexes of freight rates was limited to a feasibility study.

The general wholesale index, despite its 1935-39 time and weight base, continued to be in demand. As a necessary stop-gap measure to prevent further deterioration, revision of the weights for non-ferrous metals was undertaken. A study to determine the feasibility of using detail from the 1961 Input-Output Table was initiated.

The development of price indexes relating to capital expenditures continued during the year. For residential construction, a revision of

the labour-material input price indexes was undertaken with the assistance of Central Mortgage and Housing Corporation. The new indexes, to be released in 1973, will relate to five regions and Canada as a whole. Indexes will also be shown for each building trade and for the general contractor, thereby tracing the price movement of labour and materials required by the construction industry in producing single-unit dwellings.

For non-residential construction, model pricing was expanded to include a composite concrete and steel frame high school which will be priced in at least four cities.

Transportation and Public Utilities Division

The Transportation and Public Utilities Division produces comprehensive statistics covering rail, road, water and air transport and associated services; telecommunications; other utilities and related industries.

During the year, a comprehensive review of the Division's program brought a number of important recommendations for improvements in gaps and deficiencies in coverage, under or over reporting, quality, accuracy and timeliness of data, survey methodology, collection, compilation and processing procedures, etc. Important respondents and data users were contacted to obtain their views and suggestions and to assess their needs for modernized and updated information.

Representatives from other government departments and agencies as well as private industry assisted in the review, either as members of project teams or in an advisory capacity.

A number of changes and procedures have already been or are in the process of being implemented in various areas as a result of this program:

- A new survey covering container freight movements by ship was implemented January 1, 1972, producing data on the number, size and type of these containers.
- The production of canal statistics was discontinued to avoid duplication with St. Lawrence Seaway Authority data.
- Railway reporting schedules dealing with traffic and operations have been revised. With an improved editing operation this will improve the quality of rail information.
- A condensed questionnaire was developed for surveying the smaller trucking carriers, in which only principal statistics - revenues, expenses, wages and number of employees - were requested. This effected a reduction in the response burden and improved the response rate.

A major development in the year was collaboration in the establishment of a new Inter-departmental Committee on Transporta-

tion Statistics, consisting of senior representatives of the bureau, the Ministry of Transport, Canadian Transport Commission and the Transportation Development Agency. This committee was established to develop a comprehensive data base of transportation statistics adequate to service the needs of each of the agencies, as well as other private and public bodies. Studies were started on:

- Existing transportation statistics and the uses made of them to determine relevance and suitability.
- Current and future needs for transportation statistics, to establish the dimensions of the required data base, with an indication of the desired priorities for the development of any new surveys or studies.
- The most effective form and location of the establishment(s) responsible for the provision of the required statistical and analytical services.

A new project for the Division in road transport was a continuing Trucking Origin and Destination survey to obtain estimates of the volume of goods carried on a commodity basis from a sample of 500 common and contract for-hire trucking company records. The second full survey was initiated in January 1972; the over-all success of this survey led to a demand for corresponding information in private trucking.

In the Division's Aviation Statistics Centre, developments during the year were highlighted by the release of a new statistical handbook, *Aviation in Canada 1971*, designed to preserve and centralize diverse and scattered data and to provide a general reference and information source on Canadian civil aviation.

In other developments, the responsibility of completing a daily aircraft movement reporting form by airport managers at 39 major Canadian airports was eliminated by the use of new electronic equipment which transmitted the data directly to the Ministry of Transport's computer in Ottawa.

Information on the number of bird/aircraft collisions and reported near-misses were compiled for the first time to assist in studies on methods for eliminating the bird problem at airports and in flight.

The statistical feedback service to the aviation industry was expanded and improved considerably to make the data more useful. Changes included a regrouping of carriers on a more compatible type-of-operation and financial classification basis. Such changes enable individual companies to assess their position in relation to the industry as a whole.

In coverage of public utilities, a major review of the radio and television broadcasting and cable TV industry questionnaires was made; work was continued on the complete review of the telephone and telegraph and cable questionnaires. A monthly telephone survey was introduced for the first time to provide more current data on this industry.

Financial Statistics Branch

This Branch concentrates on two main areas of financial statistics:

- A wide range of data on the operations of business, industry and governments.
- Data on the construction and acquisition of real assets (including capital formation); the construction industries; housing starts, costs and characteristics; and building permits.

Business Finance Division

The Business Finance Division produces two general categories of statistics:

- Quarterly data on the financial position of companies.
- Data on the changing employment of financing in the intervening periods.

In addition to uses in their own right, these data form part of the system of national accounts and various econometric models. Two quarterly reports are published:

- *Industrial Corporations - Financial Statistics*, which presents detailed data on the financial operations and position for 25 major industry groups.
- *Financial Institutions*, which provides extensive financial data on a number of financial institutions and intermediaries.

Significant progress was made in both cases in redesigning questionnaires to make them conform more closely with current accounting practices.

For the industrial corporations report a new format was planned to provide a broader industry coverage, possibly up to 40 industry groups (now 25).

Updating of the financial institutions questionnaire was aimed at improved intra- and inter-statement ties including the measurements of new activities and coverage on all of the 18 or more definable financial institutions.

The Division also made significant progress in improving quality and coverage in other areas.

The annual report, *Credit Unions*, was expanded to provide additional details by province and comparative financial and trend data with other related financial institutions.

Extension of the estimates of the fixed capital flows and stocks was continued for both manufacturing and the non-manufacturing sectors. Estimates of the manufacturing sector were revised and converted into the 1960 Standard Industrial Classification and published under the title *Fixed Capital Flows and Stocks, Manufacturing*. These estimates now cover 1926 to 1969 and are shown in current, constant (1949, 1957 and 1961) and original-cost dollars. A limited start was made on researching the feasibility of producing further detailed estimates by industry and region for manufacturing.

The adoption of a new questionnaire more suited to the accounting system used in the electric utilities was completed and used for the first time in the collection of 1970 data; also for the first time

Prime concerns in the year under review were improvements in the consistency, coverage and timeliness of data and development of a series of statistics on major industrial groupings within the construction industry.

An additional priority, carried out in co-operation with the Economic Statistics Branch, was the linking of production and financial statistics to improve the quality of data and to reduce the reporting burden on respondents.

separate estimates were published for the Yukon and Northwest Territories.

The detailed investigation of the construction industry, initiated in 1967, was continued. The first and second publications in this series, *The Mechanical Contracting Industry* and *The Electrical Contracting Industry*, are now produced annually. An annual census of a third group, highway, road, street and bridge contractors, was developed during the year. Preliminary research and development was also undertaken preparatory to implementing in 1972 a census of a fourth group, general non-residential building contractors.

The quality and timeliness of the building permits statistics were improved during the year through revised computer programming. Users will now be able to obtain cumulative as well as current data by province, census subdivisions, metropolitan areas and individual municipalities for year-to-year comparisons. The program has also been designed to assist in regional analyses and measurement of non-residential construction put in place.

CALURA Division

This Division carries out the responsibilities of the Chief Statistician of Canada for administration of the Corporations and Labour Unions Returns Act (1962). The Act authorizes the collection of data for evaluating the extent and effects of non-resident ownership and control of corporations in Canada and of the extent and effects of the association of Canadian labour unions with international unions.

Under the terms of the Act, the Division produces an annual report in two parts: *Part I* on corporations; *Part II* on labour unions.

A 1965 amendment to the Act, permitting access to corporation income tax returns (which relieved many corporations of a dual reporting burden), made it possible for the Division to produce, in addition, separate annual reports on corporation financial and taxation statistics.

During 1971-72 the Division published the fifth in this series of annual reports, *Corporation Financial Statistics*, 1969. It contains information on financial operations (including income, expenditures and profits, the disposition of earnings) and on the financial position of corporations including assets, liabilities and shareholders' equity.

The financial items presented in the 1969 report, their definitions and statistical notes have been substantially improved. Comparative

Business Finance Division
CALURA Division
Governments Division

Director General
G.A. Wagdin

year's financial statistics are presented for the first time. The report also provides new tables to permit comparisons of the financial position and operations of corporations reporting losses vis-à-vis those reporting profits, and of the effects of corporation size. Separate information on federal proprietary crown corporations and integrated mining, smelting and refining companies is also provided; an appendix of 11 frequently-used financial ratios for 182 industries has been added.

Corporation Taxation Statistics, 1969 shows the industry earning the income on which tax is based, the province in which it was earned and the size of the firm. A detailed reconciliation of company book profit with taxable income is provided which indicates the magnitude of the main provisions of the Income Tax Act as well as that of the main items of income and expenditure. This table, provided in the current edition for the first time by size of corporate taxable income, as well as for corporations reporting taxable income or a loss for tax purposes, shows the varying impact of the provisions of the Act in determining taxable income.

Considerable improvements to *Part I* of the CALURA annual report have been made possible by access to corporation income tax returns which continued in 1971-72. Work on the 1969 report included compilation of financial statistics for corporations exempt from CALURA but subject to the Income Tax Act. This enables a considerably improved assessment of the relative importance of foreign and domestically-owned corporations.

Further improvements in coverage introduced in 1971-72 included financial information for federal and provincial crown corporations and municipal corporations not subject to the Income Tax Act. Ownership information for large exempt corporations operating in non-financial industries was incorporated for the first time.

Other new series covered taxation of foreign- and Canadian-controlled corporations, and publication of data on payments to non-residents was resumed. Analysis was further extended and significantly more information was provided on the concepts and methodology used to compile foreign ownership and control series.

A 1969 edition of the biennial publication, *Inter-Corporate Ownership*, was published in 1971 covering non-confidential information required by CALURA and indicating to some extent the magnitude of inter-corporate relationships in Canada. Inter-corporate links are identified from ownership of share capital reported (where one corporation owns at least

10% of the voting rights of another, an ownership "complex" is deemed to exist). Reporting corporations are grouped according to their respective complexes, representing investment by and in other companies. Non-resident corporations specifically exempted from the Act are identified, where appropriate, as holding corporations.

In other work by the Division a study was made of ways to facilitate the wider use of corporation income tax returns as a data source for other divisions.

Other projects under way will result in better industrial classification procedures for corporations, improved sampling techniques and improved techniques for the treatment of mergers, amalgamations and other structural changes affecting the comparability of the CALURA series. A pilot project involving the 850 largest corporations was also initiated to identify and resolve problems relating to timeliness, internal consistency, year-over-year comparability, industrial classification, the data needs of specific important industries, integration with other published series and other aspects affecting the quality of data.

Governments Division

In 1971-72 Governments Division concentrated on more adequately meeting user

requirements for financial statistics on governments, especially as expressed at the Statistics Canada Conference of Users of Public Finance Statistics held in November, 1970.

A major project was the review of basic concepts, classification frame works and methods of compilation of government financial management statistics.

A statement of sources and uses of funds in terms of financial management concepts for each level of government and reconciliation with corresponding financial flow statements prepared within the national accounts framework was also developed. This review of the fundamentals of financial management statistics has resulted in numerous changes to provide users with a historically consistent series of data.

Other work started in 1971-72 included:

- Compilation of federal government estimates for the new year.
- Continuous promotional work on the implementation by local governments of the new standards accounts classification systems.
- Establishment of the Division's series on government employment on the same statistical universe of government as that used for the data on government revenue, expenditure, assets and liabilities.

- Exploration with provincial Departments of Municipal Affairs of improved statistical reporting and development of a survey to identify the existing units of local governments in major cities.
- Further development of a computer-based perpetual inventory of local government debenture debt.
- The initiation of outputs of quarterly financial management data.

The principal new development during the year in respect of the national accounts was improved timeliness in the compilation of data on governments for the preliminary data releases by the Balance of Payments and Financial Flows Division, including a quarterly survey of revenue expenditure and financial flows data of school boards and of government enterprises.

The Division also participated in a number of meetings of the Technical Committee of the Federal-Provincial Continuing Committee on Fiscal and Economic Matters. These meetings reviewed the current formula used in calculating equalization payments to the provinces and recommended amendments to the new Federal-Provincial Fiscal Arrangements Act covering the period April 1, 1972 to March 31, 1977.

Socio-Economic Statistics Branch

This Branch is responsible for sociological, demographic and economic series relating to individuals, households, farms and institutions. The major activity of the Branch in 1971-72 was successful conclusion of the bureau's largest household survey, the 1971 decennial census. Conducted for the first time on a self-enumerating basis, an initial 95% response rate was achieved.

Agriculture Division Census
Division Consumer Finance
Research Staff
Education Division
Field Division
Health and Welfare Division
Judicial Division
Provincial Liaison and
Consultative Services Staff

Assistant Chief Statistician
of Canada
L.E. Rowebottom

Agriculture Division

Agriculture Division, in its planning, operation and co-ordination of a statistical system concerning the agricultural industry through annual, monthly and seasonal data reports, made several significant improvements in 1971-72.

Automation of data processing was expanded and planning laid for an enumerative sample survey for July, 1972. The new survey is designed to obtain basic information and to provide more frequent benchmark data for use in mail-questionnaire surveys carried out during the year in co-operation with provincial government agriculture departments and the Canada Department of Agriculture.

Other projects included, in addition to regular statistical projects:

- Testing of the applicability of new techniques and procedures on the use of questionnaires designed for reading by Optical Character Reading equipment.
- Development of a comprehensive body of data on various aspects of the Canadian livestock and animal products industries.
- Development of an enumerative survey to generate the national estimates for livestock numbers.
- Automation of commodity surveys to produce information on structural changes taking place in the livestock and animal products industries.
- Extension of the Alberta Cattle-on-Feed survey to all the Prairie Provinces and Ontario.
- Additional work on publication of a supplement to the *Handbook of Dairy Statistics* and the development of an historical handbook on inventories of the various food commodities in storage in Canada.

Throughout 1971-72 the calculation of farm cash receipts remained a priority project; considerable changes to the existing series were required to provide data in the form required for the Grain Income Stabilization Plan.

The feasibility of using income tax returns to generate estimates of farm cash receipts and expenditures was also studied.

Census Division

Planning for the 1971 Censuses of Population, Housing and Agriculture, that had occupied much of the five-year period after the 1966 Census, reached its final stages during the early weeks of the fiscal year 1971-72 with 50,000 temporary employees ready and in place for Census Day, June 1.

Regional processing extended through June to September and included quantity and quality checks of the questionnaires and a number of coding operations.

By year's end, microfilming, FOSDIC and editing procedures were completed for the short form and were nearing completion for the long form containing the sample information.

A series of five preliminary bulletins, completed from visitation records and giving population counts for incorporated urban centres and other organized units, were the first releases from the 1971 Census. In addition, a *1971 Census Catalogue* listed publications and provided brief descriptions of the other media in which the census results will be available.

Throughout the year, plans for the 1971 Census tabulations and publications and most of the introductory chapters for the reports and volumes were completed. Other areas of planning included specialized research tabulations, proposals for major research studies and a new series of analytical reports, *Profiles of Canada's Human and Agriculture Resources*.

An extensive evaluation program was developed to assess various facets of 1971 Census methods and procedures and to provide input for future census planning.

The final delineation of Census Metropolitan Areas and Census Agglomerations was completed; research projects to study their characteristics were being implemented.

In the Geocoding program, area master files for the 14 largest urban centres were updated to the census data; the Enumeration Area master file was also completed. Research was also started into the various uses of geocoding concepts and base files, together with the integration of the geocoding retrieval capabilities into the over-all Census Data Access Program.

Development of this program, designed to meet an expected increase in user requests, continued with emphasis on such media as summary tapes and microfilm.

Although main activities were concentrated on the collection, processing and dissemination of the 1971 Census data, planning also began for the 1976 Census.

Continuing activities of the Division included the annual reports on estimations of population and families for Canada, provinces, counties and census divisions. Current statistics on citizenship, immigration and migration were updated and processed. In anticipation of a new series of population projections by age and sex, based on the 1971 Census data, a number of background papers explored the new regional-component method for the preparation of

population projections for Canada and regions for the next 15 years. Requests for proof of age searches of early Census of National Registration records numbered some 31,000.

Consumer Finance Research Staff

A series of special reports based on data collected in the 1968 Survey of Consumer Finances, the most extensive intercensal income survey carried out in the sixties, featured work of this staff in 1971-72.

The reports included new family income statistics based on the census definition of the family; other reports covered comparative income distributions for 1965 and 1967, in 1961 constant dollars as well as by quintiles, and on the characteristics of families with low incomes.

Three more special reports based on the 1968 survey data were *An Econometric Study of Incomes of Canadian Families, 1967*, *Economic Characteristics of the Population Age 14 to 24, 1967*, and *Household Facilities by Income and Other Characteristics, 1968*. The latter report contains data collected on the 1968 Household Facilities and Equipment Survey cross-classified by data from the 1968 Survey of Consumer Finances.

The 1970 Survey of Consumer Finances carried out in May, 1971 collected comprehensive data on incomes, assets and indebtedness from a sample of 10,000 family units.

Planning was completed for another Survey of Consumer Finances in 1972; data will be collected from each individual 14 and over in some 35,000 households on income, household facilities and equipment, mortgage indebtedness and real estate taxes.

Small-area income estimates for counties and census divisions for 1966 to 1968 inclusive were published during the year.

In research, experimental work was started on the construction of a micro-data set linking data collected on the 1970 Surveys of Family Expenditures and of Consumer Finances.

The staff is participating with some other countries in a project to construct conceptually consistent income distributions to constitute systems of income and expenditure distributions complementary to the System of National Accounts.

Increasing attention was given to policy requirements in social indicators and to evaluating existing social statistics. Considerable assistance was provided to other government departments and other levels of government, to task forces and other groups for analysis of new social security proposals, for studies on low income housing needs, for evaluations of the report on the Royal Commission on the Status of Women and for a variety of other uses.

Education Division

The Division's expanded objectives and orientations became more clearly defined and implemented during the year through:

- New organizational structures and patterns.
- New surveys.
- Expansion and refinement of historical series.
- Computerized and integrated information system development.
- Production of regional publications and other special projects.
- Presentation of considerable textual material in the form of analysis, commentary and interpretation.
- A quantitatively and qualitatively increased publication production.

Divisional structures were delineated on a vertical axis with sections classified as to student information, teacher information, financial information and so on.

Within each section, data are collected and published in annual publications along elementary, secondary and tertiary education sectors.

New statistical surveys initiated included: School transportation; media utilization; federal government expenditures on the human sciences; federal aid to students; handicrafts; museums and art galleries; facilities for the study of the arts; Canadian literary awards, leisure-time activities; physical education in schools; salaries and qualifications of teachers in community colleges; diplomas and certificates awarded by Canadian degree-granting institutions; students in social work; minority-language instruction; continuing education enrolment at community colleges and universities; and short-fall in university enrolment.

The Division also started a program of collaborating with education officials to develop a nation-wide integrated, computerized education information system — an accessible data base of fundamental elements on students, teaching staff, finance and facilities in the universities.

Regional publications took the form of compendia of statistical profiles and analysis of education in the Atlantic and western provinces and Canada's northland and the special study, *A Century of Education in British Columbia*. These regional studies facilitated the publishing of current, timely comparative statistics.

For Prince Edward Island, a study was done to produce a suggested plan for establishing and maintaining a total statistical system of all educational activities in that province.

Collaboration with the Department of the Secretary of State led to these special projects being undertaken: Federal and Provincial Student Aid in Canada (completed); Characteristics of Students Receiving Aid in Canada; Minority Language Instruction; Short-Fall in University Enrolment; Facilities for the Study of the Arts in Canada; and Leisure-Time Activities.

A quarterly *Education Service Bulletin* was initiated which presents tables with analytical text and commentary. This medium has facilitated the rapid release of current education data and special statements.

Field Division

Field Division is the new name for the old Special Surveys Division; its functions have been extended from data collection on a few large and critical surveys such as the Labour Force Survey to an expanded base of on-going surveys.

To meet the new and ever-increasing statistical demands placed on the bureau, the Division's reorganization was completed during 1971-72.

During the year, four surveys were finalized: Special Care Facilities and Services Survey; Local Initiatives Program Survey; Canadian Travel Survey; and Family Expenditure Survey. Work on the Nutrition Canada Survey also continued. Throughout the year, groundwork was laid for surveys to be carried out in 1972-73.

In its work on the Labour Force Survey, in addition to data collection, the Division carried out monthly technical and operational procedures for selecting the 30,000 households in the sample to ensure that it properly represents the population as to geographic and socio-economic characteristics.

In the on-going Consumer Price Index Program, a major field pricing effort was undertaken for the eventual production of reliable average price statistics. Data were also collected from chain food stores for refinement of the outlet samples. Other projects launched included a property tax survey and the Industrial Pricing Sample was expanded in new housing construction.

A study of comparative living costs was conducted simultaneously on saturation food pricing in Halifax and Ottawa to establish inter-city differentials. A survey of all Consumer Price Index items was made in Vancouver and Prince Rupert on a cost-sharing basis.

In addition to the ongoing Job Vacancy Survey, the Division participated in a number of special projects, including a paid worker survey and an occupational employment pilot survey and census match program.

In current business surveys about 50,000 business reports were collected through the year, constituting from 15-35% of a given mail survey.

The Division was also responsible for all field activities of the 1971 decennial Census in the collection of data from 6,000,000 households, 400,000 agricultural holdings and the listing of 500,000 wholesale, retail and service establishments.

In October, 1971, some Census-oriented activities were transferred from Census Division to Field Division involving the Division, in essence, in detailed procedures and training programs, as well as logistical plans and procedures for over 45,000 individuals engaged in census data collection.

Health and Welfare Division

This Division is responsible for the production of statistics on the health of the Canadian people, the occurrence of illnesses, the distribution, cost and availability of health care and treatment and vital statistics — births, deaths, marriages and divorce.

Through the year requests for information continued at a high level with an increase in those for intensive investigations of nuptiality and fertility patterns and for information on mortality due to particular causes.

To meet demand, several analytical studies have been published and others planned, relating to cancer, accidents, heart disease, foetal and infant mortality, nuptiality, fertility and life expectancy and their trends.

Arrangements with the Department of Justice for the collection of statistics on divorce under the new Federal Divorce Act of 1968 will provide more extensive information regarding the characteristics of the parties and the number of dependents involved. A series of tables for 1969-70 has been prepared.

A fourth annual preliminary report on the mental health of individuals was published in January 1972, containing information for 1971, for those who require summary statistics as soon as possible after the reporting year. The preparation of the detailed annual report for 1970 was also completed, the product of a completely redesigned and more efficient statistical processing system.

Development of a system reflecting recent developments in psychiatric care was also undertaken with the objective of producing statistics on outpatients, patients in halfway houses, day and night centres and other facilities, as well as patients under private psychiatric care and patients receiving services under various departments.

Public health and morbidity statistics were subject to further refinement in exploitation of the information received; reports were published on surgical procedures and treatments carried out in the general and allied special hospitals. Special tabulations were also produced analyzing length of stay and deaths of patients undergoing surgery.

Two further reports dealing with therapeutic abortions were issued during the year; an individual-case reporting system was started January 1, 1972.

The notifiable diseases system answered many special requests for information on incidence of the national, provincial and city level. Special reporting forms were designed for receiving information on notifiable diseases from cities of over 100,000 population and all the provincial and territorial capitals.

In institutional data, considerable resources were devoted to the analysis and preparation of the seven annual series of Hospital Statistics. A new joint edit procedure with Alberta (and available to any other province) produced an edited tape for that province ahead of others.

Major revisions to the Quarterly Hospital Information System were conducted for implementation in early 1972. Data for mental

institutions and tuberculosis sanatoria were added to most tables in the *1970 Preliminary Report of Hospital Statistics*.

Health manpower projects were expanded during the year; two salary surveys of public health nurses and hospital nursing personnel were redeveloped; a series of 12 separate reports, dealing with health manpower occupational groups in hospitals was completed.

Two other new programs – basically similar to that for registered nurses – were the Survey of Physiotherapists and the Survey of Radiological Technicians.

Judicial Division

This Division, which measures the effectiveness of the judicial process, law enforcement, judicial procedure and rehabilitative services, expanded and improved its output during the year in several ways:

- A new prison reporting program was introduced in Nova Scotia, covering all persons admitted and released and the reason for their detention.
- A survey was made of the Northwest Territories to determine the feasibility of introducing a completely integrated system for justice in that area.
- Alberta again adopted a new reporting system for juveniles and discussions were held with Ontario to have their officials report on a similar program starting in 1972.
- Continuing consultations are being held with all agencies involved in reporting of

drug offences and convictions – an area in which reporting is unsatisfactory because municipal police forces are handling drug cases.

- Liaison with contributors was increased greatly, including several training seminars.
- The coding and processing of all data collected in the 10-year Murder Study was carried out.

Provincial Liaison and Consultative Services

The over-all responsibility of this staff is to promote federal-provincial co-operation in the development of statistics, improve the relationship between the bureau and provincial government departments and respond to provincial requests for general or specific statistical assistance. The staff also acts as the bureau's focal point for data on travel, tourism and outdoor recreation by co-ordinating with subject-matter divisions on the requirements of users.

Again this year, the staff was involved in a co-ordinating and secretariat capacity in format committee meetings on the 1971 Census, the Advisory Committee, the Legislation Committee on Confidentiality of Data, classifications and on Merchandising and Service Trade Statistics.

Following proclamation of the new Statistics Act, the staff initiated work on the existing federal-provincial co-operative agreements related to statistical development. All

provinces were visited; a variety of general consultative and liaison services were provided.

In addition to Provincial Liaison Officers stationed in Halifax and Edmonton, another was located in the Toronto Regional Office.

In order to keep the main delegates to the Federal-Provincial Conference on Economic Statistics constantly informed of developments in the bureau, an informal news bulletin was created; an increasing number of inquiries from provincial governments necessitated establishment of an inquiries answering unit.

With the addition of two officers to the staff, secretariat services were accepted for the Federal Interdepartmental Committee on Travel/Tourism/Outdoor Recreation Research, in addition to those already being provided for the Federal-Provincial Conference on Tourism's Travel Research Planning Committee and its Technical Sub-Committee.

The staff was also involved in the planning of new programs in a number of areas related to travel, tourism and outdoor recreation, most notably international travel, accommodation facilities and employment. Officers also participated in the Federal-Provincial Conference on Tourism, the annual meetings of the Travel Industry Association of Canada and the Travel Research Association, and a meeting in Geneva, Switzerland of the Conference on European Statisticians on the subject of the improvement and standardization of statistics on tourism and on proposals for an international program of tourism statistics.

Part 2: The Central Management and Service Groups

Integration and Development Staffs

This core group provides a variety of centralized research, developmental, methodology and systems services to subject-matter branches. More generally, it also acts to further the quality, effectiveness and coherence of the national statistical system as a whole.

Central Classification and Company-Establishment Integration Staff

This Staff has three main responsibilities: maintaining and revising existing statistical classification systems, adapting them for special purposes and developing new classifications; integrating statistics based on surveys of establishments (usually operating units within a company) with those obtained from company financial statements; and developing and maintaining a central list of all businesses, institutions and organizations engaged in economic activity to provide a systematic basis for the design and integration of surveys.

During 1971-72 the Classifications Section published the revised *Standard Industrial Classification Manual* and the *Occupational Classification Manual, Census of Canada, 1971*, based on the Canadian Classification and Dictionary of Occupations. These were first used in coding 1971 Census returns and subsequently implemented throughout the bureau. In addition to maintaining the industrial classification, a complete set of sub-industry categories was drawn up and rulings and interpretations made on difficult areas.

A standard commodity classification revision project was completed and the first draft of a standard classification of services was completed.

In company-establishment integration, a program of relating financial data for companies to production data obtained from their operating establishments was continued and a comprehensive revision of Statistics Canada's survey questionnaires for the manufacturing industries was effected to conform more closely to new accounting procedures.

The section also carried out developmental work and the testing of methods and procedures to establish a "central profiling" function – a detailed examination of company accounting structures and existing statistical survey units. It is designed to account for total economic activity of companies with no duplication or gaps, identifying significant differences between company financial data and establishment production data and documenting the complete company-establishment structures across all bureau survey areas.

With the new Statistics Act allowing access to income tax data, several studies were carried out with subject-matter divisions to evaluate

Central Classification and Company-Establishment Integration
Central Planning
Consultant on Demographic Research
Econometric Research
Methodology and Systems Branch
Regional Statistics
Senior Advisor on Integration

Assistant Chief Statistician of Canada
(Integration and Development)
Dr. S.A. Goldberg

the relationship between these data and current survey data and to determine the most effective methods of utilizing such data.

Central Registers, which administers and develops the Central List of Companies and Establishments for establishing standard and related reporting units for the various Statistics Canada surveys, continued to investigate and resolve inconsistencies in the Central List; 338 such problem cases were cleared. In maintenance of the file, 27,000 additions, 14,000 deletions and some 35,000 revisions were made. Investigation of 18,000 records for potential duplications or discards resulted in purging about 10,000 records.

A major task in reconciliation, and extension of the Central List to cover small employers, resulted from the transfer, December 31, 1971 of registration of employers from the Unemployment Insurance Commission (which had been the employer base of the Central List) to the Department of National Revenue-Taxation.

An initial check of the relationship between Central List, UIC and DNR-T records cleared about 250,000 payroll deduction names leaving about 241,000 more to be identified. These became subject to an Employer's Nature of Business survey; DNR-T had all new employers registering complete the survey form for Statistics Canada.

Central Planning Staff

Developmental work on a comprehensive medium-term plan to provide a framework for specifying future subject-matter content was carried out by the Central Planning Staff in 1971-72. This included planning for the refining and extension of unifying frameworks which bring the various outputs together as a coherent whole; for anticipating and adapting to the changing and technological and scientific context within which data must be collected, processed and analyzed; and for improving their timeliness and accessibility.

The staff also continued its efforts towards the development of appropriate mechanisms for the planning and allocation of resources for the achievement of program goals; for reviewing the utilization of resources in program implementation; and for the systematic exploration, on a cyclical basis, of major segments of

the departmental program. A major aspect of this work concerned the informational requirements for managerial control; attention was focussed on the ways in which existing information systems can be modified and more effectively integrated for these purposes.

Consultant on Demographic Research

The Consultant on Demographic Research concentrated attention during the year on developing specifications for the structure and content of a new system of social and demographic statistics which would provide information for analytical policy purposes. The work, which involved extensive study and discussion with experts in federal government departments and elsewhere, was expected to result in a substantial re-organization of social statistics.

Professional advice was also provided to the Economic Council of Canada, the Ministry of Urban Affairs, the Department of Regional and Economic Expansion, the Department of Manpower and Treasury Board. The consultant participated in the development of a micro-simulation model for population composition changes, which will be used to examine the distributional impact of certain proposed government programs, and continued work towards the development of more sophisticated procedures for projecting regional migration.

Econometric Research Staff

The Econometric Research Staff conducts research and provides consultative services on the application of econometric and related techniques to the production, analysis and improvement of data.

During the year, the group was involved in joint research projects with subject-matter divisions and other government departments. Important contributions were made to the development of a medium-term model; the reconciliation of differences in the estimates of paid-worker employment in Canada as derived from two types of labour surveys; and the historical revisions of the consumer expenditure estimates of the National Accounts for 1947-70.

Work relating to applications of econometric techniques for improving the timeliness and/or

quality of various economic time series also continued. Equations were developed for generating earlier quarterly estimates of inventory investment, residential and non-residential construction and other components of the national accounts. Two major studies, *An Econometric Analysis of the Determinants of Investment in Canadian Manufacturing* and *A Neo-classical Approach to the Determination of Prices and Wages*, were completed and documented. A technical paper on the analysis of post-war inflation in Canada was prepared and presented at the annual meeting of the American Economic Association.

An evaluation of existing seasonal adjustment procedures was undertaken with a view to evolving a more general procedure of seasonal adjustment.

First drafts of two studies, *Labour Force Participation Rates of Married Women* and *An Analysis of Industrial Concentration by Enterprises*, were in preparation. Work was also begun on two other projects with subject-matter divisions – audit procedures for studying the consistency and reliability of current economic statistics and the establishment of an integrated current Economic Intelligence Service.

Regional Statistics Staff

A major objective of the Regional Staff is to increase the availability of socio-economic data

for small geographical areas (counties, selected cities, etc.) on a regular basis. During the year, experimental estimates of population and migration were developed for testing estimating accuracy against the 1971 Census data through the development of developing estimating methodologies (including the utilization of various administrative records) and the associated computer programs and systems.

In its 1971-72 activities, the staff gave assistance to provincial and municipal agencies in Manitoba and Nova Scotia to utilize provincially-available records. This activity included consultation in work objectives, technical problems (coding, etc.) and system design.

Another major activity during the year was in work on developing a capacity for fast and flexible response in economic statistics to provide the maximum possible degree of regional detail consistent with the safeguarding of confidentiality.

The staff also participated in developing proposals for a bureau-wide regional data base program which would use the location of economic activity as an integrating device to bring together data from different sources through adopting compatible file organization principles in related surveys.

Senior Advisor on Integration

The position of Senior Advisor on Integration and a small supporting staff was established late

in 1970-71; 1971-72 was the first full year of operation. Among several important projects started was planning of a compendium on social statistics in which the main activity was consultations with other government departments to determine their needs in social indicators.

The staff also participated in the deliberations of working groups of the OECD and the Conference of European Statisticians in this area. With these activities as a base, a gradual selection of the most significant types of conceptually consistent social statistics from the entire Canada statistics data base was started. The staff also provided assistance for the conceptual outlines of the system of socio-demographic statistics.

Another major activity was initiation of a program for the construction of a dictionary of standard statistical definitions.

An investigation into certain environmental data needs was also initiated. Few statistics have been gathered so far, but some questions relating to pollution costs and control have been included in the Census of Manufactures questionnaire and close contact has been established with the Department of Environment with a view to the eventual development of an environmental statistics program.

A preliminary investigation into the possibility of constructing a general recreational outdoor water quality index was also undertaken in collaboration with the Department of the Environment.

Methodology and Systems Branch

This Branch is responsible for the development of survey methodology, of computer systems and programs for the processing of data and of a department-wide training program in electronic data processing. It also conducts applied research on all aspects of automation relevant in statistical information processing.

The Branch thus combines the major disciplines, except subject-matter, involved in the development of survey and census designs and their automation, thus permitting a better integration of their activities.

Computer Systems Development Division

Computer systems were developed for the processing of a large number of surveys. Major projects were the CALURA series, the 1969 Family Expenditure Survey and the External Trade Monthly Series. Numerous smaller survey systems were also successfully developed and processed.

Development work to transfer the Canadian Socio-Economic Information System (CAN-SIM) to the Computer Service Bureau in Ottawa, in on-line operation mode, was completed.

Considerable and successful experimentation was done on the use of automated photo-composition techniques for Statistics Canada publication programs. Successful results were achieved by demonstrating the ability to produce the External Trade monthly publications without manual intervention from tabulation tapes, resulting in superior appearance and about 20% savings in production costs.

Edit programs for the short-form Census questionnaires were developed, tested and completed; programs for the long form were well under way by year-end. The development of most of the Census summary tabulations was completed and tested, using a system of specifically-developed generalized programs.

To meet steadily increasing data processing work requirements, a group was established to deal with short applications – usually projects which can be implemented within 60 days. A broader orientation of system design work towards the use of generalized programs was undertaken.

Planning and integration received greater recognition with the aim of reducing subsequent re-development and modifications and to improve project management, scheduling and monitoring of all system development and implementation work.

One of the most important developments was the acceptance of the concept of generalized programs on all levels of computer systems development; their use has increased month by month.

A number of the bureau's generalized programs have been installed in various

Computer Systems Development Division
Economic and Financial Methods Staff
Socio-Economic Survey Methods Staff
Special Surveys Development Staff

Director-General
Dr. I.P. Fellegi

provincial government agencies, notably in Edmonton, Toronto, Vancouver and Saint John.

Economic and Financial Survey Methods Staff

This staff provided methodological services for the Economic and Financial Statistics Branches and for the extended Central List System which is being developed to provide integrated and comprehensive coverage for the bureau's business surveys.

During 1971-72, work continued on the extension of the Central List. A reduced version of the required system, designed for compatibility with the Department of National Revenue Taxation Payroll Deduction system which is the main source of update information for the Central List, was made operational by the end of 1971-72.

Work continued on the full version of the update program – exhaustive edits to validate all update information – which will provide major input to bureau projects and also to the various studies and negotiations for the use of taxation data for statistical purposes. Indirectly, these contributions have had a wider impact, particularly in the Job Vacancy Survey, the Employment Surveys and a new Retail Trade Survey. Several techniques developed as a part of the system have been used in all these areas and also adapted for the Census of Merchandising.

For Merchandising and Services Division, a new Retail Trade Survey, based on probability sampling and automated processing, was made operational. Work was also proceeding on the development and application of quality control and improvement devices, the acquisition of experience in the processes of data correction and the filling of special user requests for unanticipated tabulations.

In conjunction with the Merchandising and Computer Systems Development Divisions, a system was developed to create a tape of mailing addresses for the Census of Merchandising and an extensive program of quality checks to evaluate the accuracy of the Census and identify weak points in the processing of schedules was undertaken.

A computer system was devised for the processing of the Labour Division's Employment and Payrolls Survey.

Major revisions to the Job Vacancy Survey tabulation sub-system for greater efficiency and flexibility were completed and a complete set of tabulations retroactive to June 1970 was prepared.

The first full-scale For-Hire Trucking Origin and Destination for 1971 was planned and implemented and plans made for a 1972 survey on an expanded basis (increased sample size).

For Manufacturing and Primary Industries Division, a new design for the current Shipments, Inventories and Orders Survey was developed based on a probability sample and the processing of returns was comprehensively automated.

Socio-Economic Survey Methods Staff

This staff provided methodological services for Agriculture, Education, Labour, Data Processing Services and Census divisions. Projects in 1971-72 included:

For Agriculture Division, work was begun on an annual enumerative survey to collect agriculture data based on a probability sample planned for evaluating results of the non-probability survey (June Crop Survey) and eventually for integration with it to provide an over-all, scientifically-based survey.

Also under development, in collaboration with the Agriculture and Computer Systems Development Divisions, was a Central Register of Farms for use in all intercensal agricultural mail surveys. Other continuing work included field tests to assess the bias in mail surveys due to non-response and an experimental test for collecting data in machine-readable form.

A sample design for an audio-visual media survey was developed for Education Division in addition to sample designs for a student enrolment survey to investigate socio-economic or attitudinal reasons why qualified students did not attend university full time, and for a student aid survey to obtain information on the socio-economic background of students who apply for student loans.

For Labour Division, a quality control plan was designed to keep errors in the manual

coding of industry and occupational Labour Force Survey data at a minimum consistent and acceptable level of 3%.

Five major continuing projects were developed for Data Processing Services Division for the quality control of key-punching and key-editing. Quality control plans were also developed for key-editing in the 1971 Census of Agriculture data and the 1971 Census of Merchandising and for keying of a National Address Register. All schemes were based on sample verification enabling the key-punch staff to handle more workload than would otherwise be possible.

For Census Division, major work during the year was in the evaluation of the reliability and sources of error of the 1971 Census. Field work for a response variance study, designed to measure the errors due to random reporting errors in the 1971 Census of Population, was carried out during 1971-72 and the computer systems analysis for the processing of data completed. Implementation of a reverse record check, designed to estimate the proportion and type of persons and households missed by the 1971 Census, was also started. Work was also initiated on the evaluation of quality control applications in the 1971 Census. This project covers the evaluation of control plans for logistics, enumeration and coding in the Census of Population and key-editing of Census of Agriculture data.

Special Surveys Development Staff

The main responsibilities of this staff are the maintenance of the efficiency of the survey methodology of the Labour Force Survey and its periodic redesign; the design of supplementary household surveys using the general procedure and field staff employed for the LFS; and the provision of consultative and professional services on survey methodology on a cost-recoverable basis to other agencies or government departments.

Major projects carried out during 1971-72 were two types of projects in support of the Labour Force Survey: sources of error of the survey and recommendations for corrective actions; and redesign of the survey utilizing 1971 Census data.

Controlled telephone techniques for interviewing purposes were introduced in two major cities on an experimental basis.

A special study was made in Prince Edward Island to determine why certain households and persons who should have been included in the sample were missed. The problem is national in scope and a special report was prepared recommending monthly controls. In order to obtain more detailed estimates of sampling errors at sub-provincial levels than is now possible, a new variance program was written.

A study was also conducted to examine the extent to which restratification of areas would be necessary as part of the new design of the Labour Force Survey. The effect of changes in

boundaries of cities and metropolitan areas was also examined, and an implementation plan for restratification prepared; review was made of apartment sampling, the sampling problems of remote areas, the extension of the Survey to the Northwest Territories, Yukon and Indian reserves, computer use in redesign and other theoretical and operational problems.

During the year, the staff also provided assistance in development of an estimation procedure for the sample data collected in the 1971 Census and participated in development of a random rounding system to prevent the disclosure of respondent identity to the users of data collected by Statistics Canada. A review and appraisal of the methodology of collection and scope of statistics on international travel was continued, covering an interim system for collection, designed to deal with the most urgent problems of the current procedure, and a long-range program to provide alternative systems for collecting the information is being developed.

Throughout the year substantial resources were also devoted to reviewing surveys submitted to the Chief Statistician by other government departments for comment. Questionnaires and methodology were carefully scrutinized and suggestions for improving the survey design were prepared for sponsors. The staff also assisted in the development of sample design and methodology for a number of ad hoc surveys for other government departments and agencies on a cost recoverable basis.

Statistics Use and Information Services

This organization is responsible for initiating and implementing programs to advance the dissemination and uses of the bureau's output, for improving response rates and relations with respondents and other publics. Many user services are provided: answering inquiries; providing comprehensive reference facilities; publishing information ranging from the *Statistics Canada Daily* to the *Canada Year Book*; providing advisory services on the uses and limitations of data.

Information Division
Library
Statistics Use Development
Year Book Division

Co-ordinator
E.J. Marten

Information Division

The year brought a high peak of activity for Information Division in several important areas.

For the first quarter virtually all the Division's resources were devoted to publicity and public relations activities in support of the 1971 Census. In succeeding months, the Division was engaged in publicizing the bureau's change of name; in implementing within the bureau the federal identity program; developing promotional support for the 1971 Census of Merchandising and Service Businesses; and planning new and wider media dissemination programs on selected bureau reports. At year-end, plans were under way to restructure the Division and expand its activities.

In a major program of media and community relations for the 1971 Census, officers were sent to regional offices for several weeks prior to and through Census Day to advise and assist Regional Directors in co-ordinating regional publicity programs and to monitor and serve regional media outlets. At headquarters, the Division Director and a small corps of officers handled national publicity and monitored regional programs for consistency with over-all objectives. All mass media were used; a program of exposing senior Census officers on TV and radio programs was developed and co-ordinated; the scripting and production of a 30-minute TV Census film came under close supervision.

For the Census of Merchandising and Service Businesses, the Division prepared an introductory booklet for respondents, reminder mail-pieces, news releases (sent to 125 business publications) and a newspaper advertisement for insertion in all dailies and selected weeklies. The Division's Art and Design Unit also designed and developed a co-ordinated set of questionnaires.

To publicize the name change, a folder was prepared highlighting changes in the new Statistics Act; it was sent to 250,000 respondents to regular surveys and to the media. The name change also involved the Division in co-ordination of a wide range of conversion activities from letterheads to building signs.

In other activities:

- Plans were launched for revising the *Statistics Canada Daily* and *Weekly* to improve their usefulness as dissemination media for bureau output.
- The *Statistical Observer* was placed on a firm quarterly publication schedule.
- A new cover design to be applied to all regular bureau publications was developed, a distinctive visual identity was achieved in a rectangular format anchoring on a colour block (a series of 18, each of which is applied to a broad subject-matter area) and uniform contemporary type-face for titles.
- The Division's central inquiries unit was handling an average of 1,700 mail, telephone or personal-visit inquiries per month.
- A new (1971) edition of the catalogue of publications and a special catalogue of 1971 Census publications and other forms of data dissemination were published.

Library

The Statistics Canada Library maintains a large collection of reference books, periodicals, documents and reports and the output of the bureau since its inception in 1918 for use by bureau staff, outside research workers and the general public.

A study of library services and operations was undertaken during the year with the National Library to examine the advisability and practicability of improving services for department users, for other government departments and for the general public.

Results of this study are the subject of a report whose recommendations have been approved by bureau management and are now in course of implementation.

Statistics Use Development

During 1971-72 the Statistics Use Development staff continued working, at headquarters and

regions, with large private-sector users to facilitate access, and interpretation of, the bureau's output and to provide feedback to subject-matter specialists on the nature of user needs and uses.

Similar advisory and consultative services were provided to numerous municipal government planners, researchers and the academic community. The staff met with some 350 researchers who visited headquarters, made visits to some 260 users and organized or participated with subject-matter specialists in 34 user seminars or workshops. These included two workshops on consumer and industrial prices, a seminar on CANSIM, a conference on grain statistics and two sessions on Geocoding and other census data access programs.

Presentations on the range, uses and limitations of bureau output were made to universities and colleges in Toronto, Winnipeg, Vancouver, Ottawa and Hamilton.

One staff member acted as the liaison between a major industry and subject-matter officers on a long-term project involving significant data changes and development of new series for the benefit of the industry.

Year Book Division

This Division plans, compiles, edits and publishes annually, in both official languages, the official basic reference reports on Canada: the *Canada Year Book* and the handbook, *Canada*. Budgetary restrictions made publication of a 1970 edition of the Year Book impossible; a combined 1970-71 edition was published in September, 1971. *Canada, 1972* was published in March, 1972.

A special inquiries unit, based on Year Book coverage of Canadian data and other bureau sources, supplies a regular series of data to the editors of the United Nations Statistical Monthly Bulletins and to the International Labour Office. Similar material and updates of material are also supplied to many standard national and international reference works and in response to multi-subject inquiries.

Administration Branch

This Branch is responsible for internal support and service activities relating primarily to the acquisition, utilization and development of the various types of resources needed in over-all bureau operations.

Advisor on Bilingualism
Financial and Administrative
Management Consulting
Services
Personnel Administration

Director-General
G.A. Labossière

Advisor on Bilingualism

Some 1,300 of a continuing staff of 3,545 had, at year-end claimed full or partial competence in both official languages. To March 31, 1972, 871 had been tested against official bilingualism standards; 571 (17%) met the requirements. The remaining 300 were assessed as having the motivation and potential to achieve proficiency; 493 others had yet to be tested.

In line with government policy on the establishment of units working only in French, the bureau selected four as potential French-language units. This project entailed increased bilingual activity on the part of most of the bureau's service units.

Conversion of regular periodical reports to a bilingual format (or production in both languages) continued during the year. At March 31, 1972 549 (89%) of the 620 publications were available in both languages.

Financial and Administrative Services

This group in 1971-72 had these functions: Financial Services, Office Services, PRACAS (Management Progress Reporting and Cost Accounting System), Records Management and Accommodation Services.

Financial Services, during the year, co-ordinated accounts processing and financial administration for the 1971 Census; its revolving fund operations increased to 90 jobs and \$2,000,000 from 33 jobs and \$1,305,000 the previous year. The subscription mailing list administered at year-end stood at 259,968 for 13,732 copies of publications.

Office Services, which provides bureau-wide service in stationery and supplies, purchasing, forms management, stenographic pools, duplicating, printing and mailing, introduced a new system for ordering of low-cost items – by which divisions could order directly from Supply and Services. Provision for input typing of Optical Character Recognition was introduced; personnel was also trained in providing an automatic composition service.

Work continued on the development and refinement of PRACAS which provides cost-control information for the more than 700 projects in the total statistical system. Substantial improvements were made in data collections; the introduction of optical character reading achieved a considerable saving in time.

The newly-established Accommodation Services administered some 700,000 square feet

of office space in seven locations and provided service to more than 1,700 telephones. Construction was started on a 25-storey tower connected to the main building which was slated for refurbishing on completion of the tower.

Management Consulting Services

This group provides assistance to departmental managers in organization planning analysis, general systems analysis, procedures development and implementation of approved changes.

During the year organization analysis and planning projects were completed in Publications Distribution and the Office of the Advisor on Bilingualism; studies were under way at year-end in Field, Health and Welfare and Education Divisions.

A project and accounting control system was implemented in all eight regional offices. A process measurement program for 1971 Census field operations was conducted to validate rates of payment and to provide a basis for planning staff requirements and pay rates for future censuses.

Comprehensive analysis was carried out on Consumer Price Index production procedures; planning for an increase in automation in this area was carried out. A substantial pilot study was under way at year-end on the feasibility of the uses of data from personal income tax returns in lieu of surveys.

Personnel Administration

Increasing demand for personnel in most occupational groups in 1971-72 was reflected in a continued expansion of the staffing role. While recruiting problems eased in some groups, difficulties continued at professional and senior levels.

For the 1971 Census, special and extensive programs were established to meet particular needs in regional offices and at headquarters.

The summer student program for headquarters provided jobs for 40 graduate assistants and clerical work for 261 students.

Staffing for continuing positions resulted in 614 appointments, of whom 84 were economists.

Position classification activity continued brisk. A falling-off is expected, however, as classification authority is extended to Branches (a start was made during the year with Economic Statistics).

An officer evaluation program introduced for the Professional, Administrative Service and

Social Science Support groups proved valuable in staffing and promotions. New manuals were designed to enable a systematic review of employee performance.

A comprehensive manpower review was carried out covering the Professional, Administrative and Social Science Support groups. This review provided an analysis of current manpower resources, a forecast of future needs and a basic manpower plan for the current period.

In staff development and training, some 40 courses were offered within the bureau augmented by others outside; 2,331 personnel participated.

A Media Centre for producing closed-circuit TV presentations and other audio-visual aids was established during the year to provide assistance and consultation in their various applications.

Incentive Award suggestions numbered 35; six were approved, 11 rejected and 18 were under investigation at year-end. Awards made amounted to \$1,501.66. One suggestion – the Census cardboard desk – was processed for patenting under the Public Servants' Inventions Act.

Long Service Awards were made to 44 employees who had completed 25 years of service.

Data Processing Division

This Division provides equipment and techniques for the processing of data. Methods employed range up from peg-board compilations using desk calculators to the heart of the processing system: an IBM 360/65 computer with the maximum core storage capacity of 1,024,000 bytes.

The Computer Centre generally works on a five-day, 24-hour basis. By year-end, however, it was also making extensive use of commercial and other government computer services.

In software support, the Division at year-end had almost completed the development of an accounting and management reporting system to replace a leased system.

The use of key-edit for data conversion was expanded during the year to two 24 keyboard systems, from two 16 keyboard systems, giving increased productivity from the same man-year input.

During the year, 1971 census data processing became the highest priority. By March, 1972, the 100% returns had been completely processed and processing of sample returns had been substantially completed.

Cette section aide les chefs de services à établir et analyser leur organisation, à analyser des systèmes généraux, à concevoir des méthodes et à mettre en vigueur les modifications approuvées.

Au cours de l'année, des travaux d'analyse et de planification organisationnelles ont été terminés pour la Distribution des publications et le Bureau du conseiller en bilinguisme; et d'autres études ont été entreprises pour les

Divisions des opérations régionales, de la santé et du bien-être et de l'éducation.

Un système de contrôle des travaux et de comptabilité a été inauguré dans les huit bureaux régionaux. Un programme de mesure des méthodes reliées aux opérations régionales du recensement de 1971 a servi à vérifier les taux de paiement et a fourni une base pour la planification des besoins en personnel et des taux de rémunération lors des recensements à venir.

données d'enquêtes.

La Section a entrepris une analyse complète des méthodes de production de l'indice des prix à la consommation et a préparé un programme visant à augmenter l'automatisation dans ce secteur. Vers la fin de l'année, elle a commencé une importante étude pilote au sujet des différentes utilisations possibles des données contenues dans les déclarations d'impôt sur le revenu des individus en remplacement des données d'enquêtes.

Cette direction est chargée des services de soutien et autres, notamment de l'acquisition, de l'utilisation et de l'établissement des divers genres de ressources nécessaires à la bonne marche de Statistique Canada.

Conseiller en bilinguisme

Des 3,545 employés permanents, quelque 1,300 se considéraient à la fin de l'année comme entièrement ou partiellement compétents dans l'utilisation des deux langues officielles. Le 31 mars 1972, 871 d'entre elles ont subi des tests rapport aux normes officielles du bilinguisme; 571 (17 %) ont satisfait aux normes et on a estimé que les 300 autres avaient la motivation et le potentiel nécessaires pour devenir compétents; 419 autres personnes attendent de subir ce test.

Conformément à la politique du gouvernement de créer des unités de langue française, Statistique Canada a choisi quatre sous-sections francophones possibles. Cela entraînera une augmentation de l'activité bilingue de la plupart des sous-sections de services.

La publication bilingue (ou la préparation dans les deux langues) des comptes rendus périodiques s'est poursuivie cette année. Au 31 mars 1972, 584 (89 %) des 620 publications étaient disponibles dans les deux langues.

Services financiers et administratifs

En 1971-72, ce groupe était chargé des services financiers, des services de bureau, du PRACAS (système de comptabilité analytique et de surveillance de la gestion), de la gestion des dossiers et des locaux.

Au cours de l'année, les services financiers ont coordonné le dépouillement des comptes et de l'administration financière du recensement de 1971; les activités du fonds renouvelable ont augmenté à 90 postes (2 millions de dollars) contre 33 postes (\$1,305,000) l'année précédente. A la fin de l'année, la liste d'envoi postal comptait 259,968 abonnés à 13,732 exemplaires des publications.

Les services de bureau s'occupent de la papeterie, des fournitures de bureau, des achats, de la gestion des formules, des services de dactylographie et de transcription, de la polycopie, de l'impression et des envois postaux pour l'ensemble de Statistique Canada; ils ont adopté un nouveau système de commande d'articles peu coûteux qui permet aux divisions de s'adresser directement à Approuvisionnement Canada. Ils ont pris des dispositions pour la dactylographie des entrées mécanographiques et formé des employés à la composition automatique.

Conseiller en bilinguisme
Services financiers et administratifs
Services consultatifs de gestion
Administration du personnel

On a continué de développer et d'améliorer le PRACAS qui renseigne sur le contrôle du coût de plus de 700 travaux statistiques. De grandes améliorations ont été apportées à la collecte des données; l'adoption de systèmes mécanographiques a permis une économie considérable de temps.

Le nouveau service des locaux a administré environ 700,000 pieds carrés de locaux en 7 endroits et a assuré le service de plus de 1,700 appareils téléphoniques. Un édifice de 25 étages a été mis en chantier; il sera relié à l'Edifice principal qui doit être rénové lorsque le nouvel édifice sera achevé.

Administration du personnel

Une augmentation de la demande de personnel dans la plupart des groupes professionnels en 1971-72 s'est traduite par une croissance soutenue de la dotation en personnel. S'il est vrai que les problèmes de recrutement ont diminué dans certains groupes, il y a encore des difficultés aux niveaux des spécialistes et des cadres supérieurs.

Pour le recensement de 1971, de vastes programmes spéciaux ont été mis sur pied afin de répondre aux besoins particuliers des bureaux régionaux et du bureau central.

Le programme d'emploi d'étudiants au bureau central a permis la création de postes pour quarante diplômés et procure du travail de bureau à 261 étudiants.

La dotation en personnel des postes permanents s'est traduite par 614 nominations, dont 84 économistes.

Un rythme accéléré. Toutefois, on prévoit une diminution des travaux à mesure que les directions en assumeront la responsabilité (cette année la Direction de la statistique économique a été la première à le faire).

Le programme d'évaluation des agents des groupes professionnels, administratif et de soutien des sciences sociales a donné de bons résultats sur le plan de la dotation et des promotions. De nouveaux manuels permettront de réviser systématiquement le rendement des employés. Une revue complète des ressources en main-d'œuvre a été effectuée pour les groupes professionnels, administratif et de soutien des sciences sociales. Elle a permis d'analyser les effectifs actuels, de prévoir les besoins

futurs et d'établir un programme fondamental de main-d'œuvre pour la période en cours.

Au chapitre du perfectionnement et de la formation, une quarantaine de cours ont été offerts à Statistique Canada et certains autres à l'extérieur; 2,331 employés y ont participé.

Au cours de l'année, on a créé un centre de média afin de réaliser des émissions de télévision en circuit fermé; d'autres aides audiovisuelles ont aussi servi à divers programmes d'assistance et de consultation.

Le conseil des primes d'encouragement a reçu 35 suggestions; 6 ont été approuvées, 11 rejetées et 18 étaient encore à l'étude à la fin de l'année. Les primes ont totalisé \$1,501,66. Une suggestion (le bureau en carton pour le recensement) a été brevetée en vertu de la Loi sur les inventions des fonctionnaires publics.

Quelque 44 employés ont reçu un certificat de 25 années de service.

Division du traitement des données

Cette division fournit le matériel et les techniques de calcul est exploité en général cinq jours par semaine, vingt-quatre heures par jour. Toutefois, à la fin de l'année, la Division a fait de plus en plus appel à des services commerciaux et à d'autres services informatiques de l'Etat.

En ce qui a trait au programme, la Division a presque terminé sa mise au point d'un système de comptabilité et d'information de la gestion qui remplacera le système qu'elle loue.

On a accru la conversion mécanique des données en utilisant deux systèmes à 24 plutôt qu'à 16 claviers, ce qui accroît la productivité tout en conservant le même nombre d'années-hommes.

Le traitement des données du recensement de 1971 a reçu la priorité. En mars 1972, toutes les déclarations à 100 % étaient dépouillées et les autres l'étaient en grande partie.

Ce service est chargé de concevoir et de mettre en oeuvre des programmes qui favorisent la diffusion et l'utilisation des statistiques du Bureau; il veille aussi à améliorer le taux de réponse et les relations avec les enquêtes et le public. Il offre un grand nombre de services aux

Division de l'information

Cette année, la Division de l'information a été très active dans plusieurs domaines importants.

Au premier trimestre, presque toutes ses ressources ont été consacrées à la publicité et aux relations publiques en vue du recensement de 1971. Par la suite, elle s'est occupée de faire connaître le nouveau nom du Bureau, de promouvoir sur le plan interne le programme d'identification fédérale, de concevoir la publicité du recensement des commerces et des services de 1971 et de planifier un nouveau programme destiné à diffuser davantage certaines publications du Bureau aux médias. A la fin de l'année, la Division a entrepris un programme de restructuring et d'expansion de ses activités.

Dans le cadre d'un vaste programme de relation avec les organes d'information et le grand public à l'occasion du recensement de 1971, des agents ont été envoyés dans les bureaux régionaux durant plusieurs semaines avant le jour du recensement afin de conseiller et d'aider les directeurs régionaux à coordonner les programmes publicitaires régionaux et d'assister les organes d'information locaux. Au bureau central, le directeur de la Division et un petit groupe d'agents se sont occupés de la publicité à l'échelle nationale et du contrôle des programmes régionaux pour en assurer l'unité par rapport aux objectifs généraux. Tous les grands moyens de communication ont été utilisés. Un programme, créé et coordonné par la Division, a permis aux agents supérieurs du recensement de se faire entendre à la télévision et à la radio; le scénario et la production d'un film de 30 minutes pour la télévision au sujet du recensement ont fait l'objet d'une supervision étroite.

En ce qui a trait au recensement des commerces et des services, la Division a rédigé une brochure explicative pour les enquêtes, des lettres de rappel, des communiqués (expédiés à 125 publications commerciales) et une annonce qui a paru dans tous les quotidiens et certains hebdomadaires.

La Sous-section des arts graphiques de la Division a également établi un jeu unifié de questionnaires.

Afin de faire connaître le nouveau nom de Statistique Canada, un dépliant soulignant les faits saillants de la nouvelle Loi sur la statistique a été envoyé à 250,000 enquêtes régulières

utilisateurs: réponses aux demandes de renseignements, service complet de référence, publications diverses allant du *Quotidien de Statistique Canada* à l'*Annuaire du Canada* et conseils sur l'utilisation et les limites des données.

ainsi qu'aux organes d'information. A la suite de ce changement, la Division a dû également assurer la coordination d'une grande variété de modifications des en-têtes de lettres aux affilés dans les immeubles.

Parmi les autres activités, mentionnons: l'*Hebdomadaire de Statistique Canada* afin qu'ils diffusent mieux l'information statistique du Bureau.

— Publication trimestrielle de l'*Observateur statistique*.
— Dessin d'une nouvelle couverture pour toutes les publications régulières de Statistique Canada; il s'agit d'un rectangle blanc où un bloc de couleur permet d'identifier visuellement le sujet (18 couleurs se rapportant aux grandes spécialisations) et où le titre paraît en caractères modernes et uniformes.

— Réponses de la Sous-section centrale des renseignements de la Division à 1,700 demandes de renseignements par la poste, le téléphone ou des visites personnelles en moyenne par mois.

— Publication d'une nouvelle édition (1971) du catalogue des publications du recensement de 1971 de même que d'autres formules pour la diffusion des données.

La bibliothèque de Statistique Canada conserve une vaste collection de livres, de périodiques, de documents, de rapports et de publications de référence, remontant à la création du Bureau en 1918, qu'elle met à la disposition du personnel, des chercheurs extérieurs et du grand public.

Une étude des services et des activités de la bibliothèque a été entreprise au cours de l'année en collaboration avec la Bibliothèque nationale afin d'étudier l'utilité et la praticabilité d'améliorer les services destinés aux utilisateurs du Bureau, des autres ministères et du grand public.

Les résultats de cette étude font l'objet d'un rapport dont les recommandations ont été approuvées par la direction de Statistique Canada et sont en voie d'application.

Promotion de l'information statistique

En 1971-72, le personnel de la promotion de l'information statistique a continué son travail au bureau central et dans les bureaux régionaux

Division de l'information
Bibliothèque
Promotion de l'information statistique
Division de l'Annuaire du Canada
Coordonnateur
E.J. Marten

Ces services de consultation ont également été offerts à un grand nombre de planificateurs municipaux, de chercheurs et d'universitaires. Le personnel a rencontré quelque 350 chercheurs au bureau central; ils ont rendu visite à environ 260 utilisateurs et ont collaboré avec des spécialistes à 34 colloques ou ateliers de travail, à titre d'organisateur ou de participant. Parmi ces rencontres, il y a eu deux ateliers de travail sur les prix à la consommation CANSIM, une conférence sur la statistique des cétales et deux séances d'information sur le géocodage et d'autres programmes d'accès aux données du recensement.

Un membre du personnel a agi à titre d'agent de liaison entre une grande branche d'activité et les spécialistes dans le cadre d'un projet à long terme entraînant des modifications importantes aux données et la préparation de nouvelles séries statistiques.

Division de l'annuaire du Canada

Chaque année, cette Division planifie, collige, vérifie et publie, en français et en anglais, les deux ouvrages officiels de référence sur le Canada: *Annuaire du Canada* et *Canada*. Des restrictions budgétaires ont empêché la publication de l'*Annuaire* qui a été remplacée en septembre 1971 par une édition condensée 1970-71. *Canada, 1972* a été publié en mars 1972.

La Sous-section des renseignements spéciaux s'occupe de la diffusion des données canadiennes de l'*Annuaire* et d'autres sources du Bureau; elle prépare une série régulière de données pour les éditeurs du Bulletin mensuel de statistique des Nations Unies et le Bureau international du travail. Elle fournit également du matériel et des mises à jour semblables destinées aux ouvrages de référence de nombreux organismes nationaux et internationaux et répond à des demandes de renseignements pluridisciplinaires.

Direction de la méthodologie et des systèmes

La Direction s'occupe d'établir la méthodologie des enquêtes, les méthodes et programmes de traitement électronique des données ainsi qu'un programme de formation en informatique à l'échelle du Bureau. Elle effectue également des recherches sur tous les aspects de l'automatisation reliés à l'information statistique.

Division du développement des méthodes de traitement électronique

La Division a mis au point des systèmes informatiques qui permettent de traiter un grand nombre d'enquêtes. Ses principaux travaux ont été les séries CALUTA, l'enquête de 1969 sur les dépenses des familles et les séries mensuelles sur le commerce extérieur. De nombreux systèmes d'enquête moins importants ont également été conçus et exploités avec succès. La Division a en outre relié directement le Système canadien d'informatique socio-économique (CANSIM) au Bureau des services d'informatique à Ottawa.

De nombreuses expériences positives ont été portées sur l'utilisation de techniques automatisées de photocomposition pour les programmes de publication de Statistique Canada. La Division a démontré la possibilité de produire des publications mensuelles sur le commerce extérieur sans intervention manuelle à l'aide de bandes de tabulation, ce qui a permis d'améliorer la présentation et d'épargner environ 20 % des frais de production.

La Division a élaboré, testé et implanté des programmes de vérification des questionnaires, un abrégé du recensement; à la fin de l'année, un travail identique était en cours pour les formes longues. La plupart des mises en tableaux sommaires du recensement ont été conçues et testées à l'aide d'un système de programmes généraux spécialement conçus à cette fin.

Afin de répondre aux demandes sans cesse accrues de dépouillement des données, le service a mis sur pied un groupe chargé de traiter des demandes à court terme; il agit généralement de projets qui peuvent être réalisés en moins de dix jours. Il a entrepris d'élargir davantage le travail de conception des systèmes en fonction de l'utilisation des programmes généraux.

On a accordé plus d'attention à la planification et à l'intégration dans le but de réduire les remaniements ultérieurs et d'améliorer la gestion des travaux ainsi que l'ordonnancement et le contrôle de la conception et de l'implantation des systèmes.

L'un des grands progrès réalisés par la Division a consisté dans l'adoption du concept du développement des systèmes informatiques. Plusieurs programmes généraux du Bureau ont été adoptés par divers organes du gouvernement provinciaux, notamment à Edmonton, Toronto, Vancouver et Saint-Jean.

Service de la méthodologie des enquêtes économiques et financières

La Direction réunit ainsi les principales disciplines (sauf les domaines spécialisés) qui sont traités dans l'automatisation et l'élaboration de systèmes d'enquête et de recensement, ce qui lui permet de mieux intégrer des activités.

La Division du développement des méthodes de traitement électronique a continué à travailler à la version complète du programme par des contrôles exhaustifs destinés à vérifier tous les renseignements mis à jour; cette liste constitue la principale source d'information pour les projets du Bureau et pour diverses enquêtes et négociations portant sur l'utilisation des données financières à des fins statistiques. Indirectement, ces travaux ont eu d'autres effets, particulièrement sur l'enquête sur les postes vacants, les enquêtes sur l'emploi et la nouvelle enquête sur le commerce de détail. Plusieurs techniques, conçues dans le cadre du système, ont été utilisées dans tous ces domaines et ont également été adaptées au recensement du commerce.

Pour le compte de la Division du commerce et des services, on a entrepris une nouvelle enquête sur le commerce de détail fondée sur un échantillonnage probabiliste et une méthode de traitement automatique. On a également continué à élaborer et appliquer des méthodes de contrôle qualitatif et de perfectionnement, à acquérir de l'expérience en matière de correction des données et de réponse aux demandes particulières des utilisateurs découlant d'obtenir des tableaux imprimés.

En collaboration avec les Divisions du commerce et du développement des méthodes de traitement électronique, le Service a mis au point un système visant à réaliser une bande d'adresses pour le recensement du commerce ainsi qu'un programme extensif de contrôle qualitatif destiné à évaluer l'exactitude du recensement et à déceler les points faibles dans le dépouillement des questionnaires.

Un système mécanographique a été mis au point pour le dépouillement de l'enquête sur l'emploi et la rémunération effectuée par la Division du travail.

Le Service a apporté d'importantes révisions au sous-système de mise en tableaux de l'en-

Service de la méthodologie des enquêtes socio-économiques

Ce groupe assure des services méthodologiques aux Divisions de l'agriculture, de l'éducation, du travail, du traitement des données et du recensement. Voici quelques unes de ses réalisations en 1971-72:

Pour la Division de l'agriculture, le Service a entrepris une enquête descriptive annuelle destinée à réunir les données agricoles d'un échantillon probabiliste afin d'évaluer les résultats de l'enquête non probabiliste (enquête de juin sur les cultures); ultérieurement ces deux enquêtes seront fusionnées en une enquête globale, à base scientifique.

En collaboration avec les divisions de l'agriculture et du développement des méthodes de traitement électronique, le Service travaille également à l'élaboration d'un registre central des formes destiné à toutes les enquêtes agricoles interconnectées par la poste. Il a continué à élaborer des tests régionaux afin de déceler dans les enquêtes postales, les erreurs dues à la non-réponse ainsi qu'un test expérimental destiné à cueillir des données sous forme mécanographique.

A l'intention de la Division de l'éducation, le Service a conçu des plans d'échantillonnage pour trois enquêtes: une sur les médias audiovisuels, une autre sur les inscriptions des étudiants, destinée à déterminer les raisons socio-économiques ou psychologiques qui empêchent les étudiants qualifiés de fréquenter l'université à plein temps, et une troisième sur l'aide aux étudiants, qui donnera des renseignements sur la situation socio-économique des étudiants qui demandent des prêts.

Le Service a conçu pour la Division du travail un programme de contrôle qualitatif

Service de la méthodologie économique et financière
Service de développement des enquêtes spéciales
Dr. I.P. Fellegi
Directeur général

révisions chronologiques des estimations des dépenses des consommateurs dans les comptes nationaux de 1947 à 1970.

Le service s'est également employé à appliquer les techniques de l'économétrie pour améliorer l'actualité et la qualité de diverses séries chronologiques économiques. Il a conçu des équations destinées aux prévisions trimestrielles haïves des inventaires, d'investissements, de la construction résidentielle ou non résidentielle, et d'autres composants des comptes nationaux. Deux importantes études ont été réalisées; l'une portait sur l'analyse économétrique des déterminants d'investissements dans les industries manufacturières canadiennes et l'autre, sur l'approche néoclassique pour déterminer les prix et salaires. Une étude technique sur l'analyse de l'inflation d'après-guerre au Canada a été rédigée et présentée au congrès annuel de l'*American Economic Association*.

Le groupe a entrepris une évaluation des procédés de désaisonnalisation existants, dans le but de trouver une méthode plus générale.

On a terminé l'ébauche de deux études, l'une sur le taux d'activité des femmes mariées et l'autre sur la concentration industrielle par entreprises. Le service a également entrepris deux autres projets avec des divisions spécialisées: élaboration de méthodes de vérification de la consistance et de la fiabilité des statistiques économiques courantes, et établissement d'un service d'information économique intégré.

Statistique régionale

Un des principaux objectifs du Service de la statistique régionale est d'augmenter les don-

nées socio-économiques courantes sur de petites régions géographiques (comtés, villes, etc.). Au cours de l'année, le service a mis au point des estimations expérimentales de la population et des mouvements migratoires afin de tester la précision de ses évaluations en regard des données du recensement de 1971 au moyen de nouvelles méthodes d'estimations (notamment l'utilisation de divers dossiers administratifs) et de programmes et systèmes informatiques

connexes.

En 1971-72, le service a aidé les organismes provinciaux et municipaux du Manitoba et de Nouvelle-Écosse à utiliser les dossiers disponibles dans la province. Il les a consultés sur les objectifs du travail, les problèmes techniques (codage, etc.) et la conception du système.

Une autre activité importante au cours de l'année a été la mise au point d'un système rapide et flexible pour répondre aux demandes de statistiques économiques qui soit le plus détaillé possible au niveau régional tout en sauvegardant la confidentialité des données.

Le service a également participé à la rédaction de propositions pour établir à l'échelle du Bureau un programme de base des données régionales qui se servirait de la localisation des activités économiques pour intégrer des données de sources différentes en adoptant un plan compatible pour les fichiers d'enquêtes connexes.

Conseiller supérieur en intégration

Le poste de conseiller supérieur en intégration, auquel on a joint un petit groupe de soutien, a été créé vers la fin de l'exercice 1970-71; le

service a pleinement fonctionné pour la première fois en 1971-72. Entre autres projets importants, il a préparé un abrégé de statistiques sociales, qui a exigé surtout des consultations avec d'autres ministères afin de déterminer les indicateurs sociaux dont ils avaient besoin.

Le service a également participé aux délibérations à ce sujet de groupes de travail de l'OCDE et de la Conférence des statisticiens européens. En s'appuyant sur l'information acquise, il a commencé une sélection graduelle des types de statistiques sociales les plus importants et conceptuellement logiques à partir des données statistiques de base pour tout le Canada. Il a également collaboré à l'élaboration des grandes lignes conceptuelles du système de statistiques socio-démographiques.

Une autre activité importante a été l'initiation d'un programme visant à rédiger un dictionnaire des définitions statistiques courantes.

Le service a également effectué une enquête sur les besoins en données sur l'environnement. Jusqu'à présent, peu de statistiques ont été rassemblées, mais certaines questions sur la lutte contre la pollution et son coût ont été incluses dans le questionnaire du recensement des manufactures, et d'étroits contacts ont été établis avec le ministère de l'Environnement afin de créer éventuellement un programme de statistiques sur l'environnement.

On a également étudié, en collaboration avec le ministère de l'Environnement, l'ité de créer un indice général de la qualité de l'eau des plans d'eau réservés à des fins récréatives.

Partie 2: La gestion centrale et les groupes de services

Intégration et développement

Ce groupe essentiel fournit aux directions spécialisées divers services statistiques et statistiques, développement, méthodologie et systèmes. De façon générale, il cherche à améliorer la qualité, l'efficacité et la cohérence du système statistique national dans son ensemble.

Classification centrale et intégration société-établissements

Les trois principales responsabilités de ce service sont: la tenue à jour et la révision des systèmes de classification statistique existants, leur adaptation aux besoins et la création de nouveaux systèmes; l'intégration des statistiques fondées sur des enquêtes sur les établissements (généralement des unités d'exploitation au sein d'une société) et de celles provenant des états financiers des sociétés; l'élaboration et la tenue d'une liste de tous les commerces, institutions et organisations qui participent à l'activité économique afin d'établir une base systématique pour la conception et l'intégration d'en-

quêtes.

En 1971-72, la Section des classifications a publié une révision de la *Classification des activités économiques* ainsi que la *Classification des professions, recensement du Canada, 1971*, inspirée de la Classification canadienne descriptive des professions. Ces deux ouvrages ont été utilisés pour la première fois lors du codage des réponses au recensement de 1971, puis leur utilisation s'est généralisée dans tout le Bureau.

En plus de la classification industrielle, une série complète de catégories de sous-industries a été établie; dans les cas difficiles, il a fallu prendre des décisions et faire des interprétations. La Section a achevé la révision de la Classification type des marchandises et la rédaction d'un projet de Classification type des services.

Quant à la Section de l'intégration société-établissements, elle a poursuivi un programme visant à relier les données financières des sociétés aux données sur la production obtenues de leurs établissements; elle a aussi révisé complètement les questionnaires d'enquête des manufactures pour les adapter davantage aux nouveaux systèmes comptables.

La section a également mis au point et testé des méthodes et procédés pour établir un service de "profil central". Il s'agit d'une analyse détaillée de la structure comptable d'une entreprise et de ses unités d'enquêtes statistiques. Elle a pour but de combiner toute l'activité économique des sociétés sans répétition ou omission, d'identifier les différences importantes entre les données financières de la société et les données de production des établissements et de fournir les structures comptables des sociétés-établissements dans tous les secteurs d'enquête du Bureau.

Classification centrale et intégration société-établissements
Planification centrale
Expert-conseil en recherche démographique
Service de recherches en économie
Direction de la méthodologie et des systèmes

Par suite de la nouvelle Loi sur la statistique

qui donne accès aux données fiscales, plusieurs études ont été menées avec les divisions spécialisées afin d'évaluer la relation entre ces données et celles de l'enquête courante et de déterminer la meilleure façon de les étudier.

La Section des registres centraux administratifs a complété la Liste centrale des sociétés et des établissements utilisée pour constituer des unités déclarantes normalisées et connexes lors des diverses enquêtes de Statistique Canada; elle a continué à rechercher et corriger les incohérences de la Liste centrale et elle a réglé 338 problèmes. Au cours de la mise à jour du dossier, elle a effectué 27,000 entrées, 14,000 retraits et 35,000 révisions. La recherche des répétitions et des radiations dans 18,000 dossiers a entraîné la suppression d'environ 10,000 fiches.

Une des grandes tâches a été de concilier et d'élargir la Liste centrale pour couvrir les petits employeurs à la suite du transfert au ministère du Revenu national-impôt, le 31 décembre 1971, des employeurs inscrits dans les dossiers de la Commission d'Assurance-chômage (qui constituaient la base de la Liste centrale).

Une vérification initiale des relations entre les dossiers de la Liste centrale, de la Commission d'Assurance-chômage, et du ministère du Revenu national-impôt a fait apparaître 250,000 noms d'employeurs qui effectuaient des déductions salariales. Il en reste environ 241,000 autres à identifier. Ces employeurs font l'objet d'une enquête sur la nature de leur entreprise et le ministère du RN-1 a fait remplir à tous les nouveaux employeurs enregistrés la formule de déclaration de Statistique Canada.

Planification

En 1971-72, la Section de la planification a travaillé à élaborer un plan général à moyen terme destiné à fournir un cadre de travail pour préciser les futurs sujets de spécialisation. Elle a cherché entre autres à améliorer et à unifier davantage les cadres de travail qui font des diverses productions un ensemble cohérent; à prévoir l'évolution du contexte technologique et scientifique dans lequel les données doivent être collectées, traitées et analysées et à s'adapter à ces changements; enfin, à améliorer l'actualité et l'accessibilité des données.

Le personnel poursuit ses efforts pour mettre en oeuvre des mécanismes appropriés qui serviront à la planification et à l'attribution de

Expert-conseil en recherche démographique

efficacement.

ressources afin de réaliser les objectifs du programme à la révision des ressources utilisées pour la réalisation du programme et à l'analyse systématique, et régulière, des principaux segments. Un aspect important de ce travail concernait les renseignements nécessaires au contrôle gestionnel; l'attention a été portée sur les façons dont les systèmes actuels d'information peuvent être modifiés et intégrés plus efficacement.

Expert-conseil en recherche démographique

Au cours de l'année, l'expert-conseil en recherche démographique s'est consacré à l'élaboration de spécifications pour la structure et le contenu d'un nouveau système de statistiques sociales et démographiques qui fournirait des renseignements à des fins analytiques. Ce travail, qui a exigé des études approfondies et des discussions avec des spécialistes des ministères fédéraux et d'alliés, devait amener une réorganisation substantielle des statistiques sociales.

L'expert-conseil a également conseillé le Conseil économique du Canada, les ministères des Affaires urbaines, de l'Expansion économique régionale, de la Main-d'oeuvre et le Conseil du Trésor. Il a participé à l'élaboration d'un système micro-simulateur de l'évolution de la composition démographique qui servira à analyser la répartition des effets de certains programmes projetés par l'État. Enfin, il a continué à élaborer des procédés plus complexes pour la projection de la migration régionale.

Services de recherches en économétrie

Le Service de recherches en économétrie exécute des recherches et fournit des consultations économiques et d'autres techniques en ce qui a trait à l'application des techniques connexes, à l'analyse, à la production et à l'amélioration des données.

Au cours de l'exercice, le groupe a effectué des travaux de recherche de concert avec des divisions spécialisées et d'autres ministères fédéraux. Il a beaucoup contribué à l'élaboration d'un modèle à moyen terme, à la correction des écarts dans les estimations de l'emploi des salariés au Canada, provenant de deux types d'enquêtes sur la population active, ainsi qu'aux

Cette Division est chargée de recueillir des statistiques sur l'état de santé des Canadiens, sur leurs maladies, ainsi que sur la répartition, le coût et l'offre de soins et traitements médicaux; elle fournit aussi des statistiques de l'état civil: naissances, décès, mariages et divorces.

Au cours de l'année, les demandes de renseignements ont continué à affluer, particulièrement dans le domaine de la nuptialité, de la fécondité et des causes de décès.

Afin de répondre à ces demandes, la Division a préparé et publié des études analytiques sur le cancer, les accidents, les maladies de coeur, la mortalité fœtale et infantile, la nuptialité, la fécondité, l'espérance de vie ainsi que sur leur évolution.

Des dispositions ont été prises avec le ministère de la Justice afin de recueillir des statistiques sur le divorce en vertu de la nouvelle loi fédérale sur le divorce de 1968. Le système fournira plus de renseignements sur les caractéristiques des époux et le nombre de personnes à charge. Une série de tableaux a été préparée pour 1969-70.

En janvier 1972, la Division a publié un rapport préliminaire sur l'hygiène mentale, concernant des renseignements pour 1971, à l'intention des personnes désirant des statistiques somatiques immédiatement après l'année de référence. Elle a également terminé la rédaction du rapport annuel détaillé de 1970, ce dernier étant le produit d'un système de traitement statistique complètement remanié et plus efficace.

Elle a également entrepris l'élaboration d'un système reflétant l'évolution récente des soins psychiatriques afin de produire des statistiques sur les malades traités dans les foyers de transition, les centres de soins de jour ou de nuit et les autres services psychiatriques privés et sur ceux qui reçoivent des soins de divers services.

La division a continué à améliorer son système statistique sur la santé publique et la morbidité afin de mieux exploiter les renseignements reçus; elle a publié des rapports sur les hôpitaux généraux ou spécialisés. Elle a également produit des tableaux spéciaux sur la durée de l'hospitalisation et les décès des malades ayant subi une opération chirurgicale. Deux autres rapports traitant de l'avortement thérapeutique ont été publiés pendant l'année et un système de comptes rendus sur le nombre d'avortements a été instauré le 1^{er} janvier 1972.

Le service des maladies a déclaré obligation à répondre à des nombreuses demandes particulières de renseignements sur le nombre de cas aux niveaux national, provincial et municipal. Des formules spéciales de déclaration ont été élaborées afin d'obtenir ces maladies des renseignements des villes de plus de 100,000 habitants et de toutes les capitales des provinces et territoires.

Dans le domaine des données sur les institutions, la Division a consacré d'importantes ressources à l'analyse et à la préparation de la septième série annuelle de statistiques hospitalières. Une nouvelle méthode de contrôle établie avec l'aide des données de l'Alberta (et accessible à toutes les autres provinces) a permis de mettre au point une bande révisée pour cette province avant les autres.

Des révisions importantes, qui sont entrées en vigueur au début de 1972, ont été apportées au système d'information trimestrielle sur les hôpitaux. Des données sur les institutions psychiatriques et sanatoriums ont été ajoutées à la plupart des tableaux du rapport préliminaire de statistiques sur les hôpitaux de 1970.

Pendant l'année, la Division a élargi la portée de ses études sur les effectifs sanitaires; deux enquêtes sur les salaires des infirmières hygiénistes et du personnel infirmier des hôpitaux ont été remaniées et une série de douze rapports distincts portant sur les professions des effectifs sanitaires dans les hôpitaux a été terminée.

Enfin, la Division a lancé deux nouveaux programmes semblables à celui qui traite des infirmières diplômées: l'enquête sur les physiothérapeutes et l'enquête sur les techniciens en radiologie.

Division de la statistique judiciaire

La Division, dont la fonction consiste à mesurer l'efficacité du système judiciaire, de l'application de la loi, de la procédure judiciaire et des services de réhabilitation a élargi son champ d'activité et intensifié ses activités pendant l'année grâce à:

- une nouvelle méthode de déclaration pour les prisons, introduite en Nouvelle-Écosse, qui touche toutes les personnes incarcérées ou libérées et le motif de leur incarcération.
- une enquête effectuée dans les Territoires du Nord-Ouest afin de déterminer la possibilité d'introduire dans cette région un système judiciaire unitifié.
- une nouvelle méthode de déclaration pour les délinquants juvéniles adoptée en Alberta et la tenue de discussions avec les responsables de l'Ontario en vue de l'adoption d'un programme semblable en 1972.
- un contact permanent avec tous les organismes s'occupant de la déclaration des délits et des condamnations dans le domaine de la drogue; comme ce domaine relève des corps policiers municipaux, la méthode de déclaration est insatisfaisante.
- de meilleures communications avec les répondants, notamment l'organisation de plusieurs séminaires de formation.
- la codification et le dépouillement de toutes les données recueillies au cours d'une étude décennale sur les meurtres.

Service de liaison et de consultation avec les provinces

Le principal rôle de ce service est d'encourager la coopération fédérale-provinciale dans la production de statistiques, d'améliorer les relations entre le Bureau et les ministères provinciaux et de répondre aux demandes d'aide statistique de nature générale ou particulière émanant des provinces. Le service agit également comme point de contact du Bureau en ce qui concerne les données relatives aux voyages, au tourisme et aux loisirs de plein air en faisant connaître aux divisions spécialisées les besoins des utilisateurs. Le service agit également comme groupe de la classification statistique du commerce et des services.

À la suite de la promulgation de la nouvelle Loi sur la statistique, le service a commencé l'étude des accords de coopération fédérale-provinciale dans le domaine de la statistique. Ses membres ont visité toutes les provinces et leur ont fourni divers services généraux de consultation et de liaison.

En plus des deux agents de liaison provinciaux postés à Halifax et Edmonton, un autre a été affecté au bureau régional de Toronto. Afin de tenir les principaux délégués à la conférence fédérale provinciale sur la statistique économique au courant des faits saillants du Bureau, le Service a mis un bulletin de nouvelles en circulation; il a en outre établi une section chargée de répondre aux questions sans cesse plus nombreuses des gouvernements provinciaux.

Après avoir augmenté son personnel de deux nouveaux agents, le Service a pu assurer le secrétariat du comité interministériel fédéral de recherche sur les voyages, le tourisme et les activités de plein air, tout en continuant à assurer le secrétariat du comité d'orientation de la recherche touristique et de son sous-comité technique créés par la conférence fédérale-provinciale sur le tourisme.

Le service a également participé à la planification de nouveaux programmes dans des domaines variés ayant trait aux voyages, au tourisme et aux activités de plein air, particulièrement les voyages internationaux, les moyens d'hébergement et le personnel hôtelier. Ses agents ont participé à la conférence fédérale-provinciale sur le tourisme, à l'assemblée annuelle de l'Association de l'Industrie touristique du Canada et de la Travel Research Association, ainsi qu'à une assemblée à Genève (Suisse) de la Conférence des statisticiens européens qui portait sur l'amélioration et la normalisation des statistiques touristiques et sur un projet de programme international dans ce domaine.

des Canadiens en 1967, une étude sur les caractéristiques économiques de la population de 14-24 ans en 1967, et une autre sur l'équipement des ménages en 1968 d'après le revenu et d'autres caractéristiques. Ce dernier rapport recoupe les données recueillies au cours de l'enquête de 1968 sur l'équipement des ménages avec celles de l'enquête de 1968 sur les finances des consommateurs.

L'enquête sur les finances des consommateurs, effectuée en mai 1970, a recueilli des données détaillées relatives au revenu, à l'actif et aux dettes d'un échantillon d'environ 10,000 ménages.

Le Service a également terminé la préparation d'une autre enquête sur les finances des consommateurs où chaque personne de 14 ans et plus, dans quelque 35,000 ménages, fournira des données sur le revenu, l'équipement ménager, la dette hypothécaire et les impôts immobiliers.

Il a publié pendant l'année des estimations du revenu des petites régions pour les comtés et les divisions de recensement, de 1966 à 1968 inclusivement.

Dans le domaine de la recherche, la Division a entrepris à titre expérimental la constitution d'un ensemble de micro-données réunissant les données recueillies lors des enquêtes de 1970 sur les dépenses des familles et les finances des consommateurs.

Le personnel de la Division a participé avec d'autres pays à l'élaboration d'un système cohérent de répartition des revenus qui constituera un complément du système des comptes nationaux.

La Division a accordé une attention grandissante aux besoins des technocrates dans le domaine des indicateurs sociaux et à l'évaluation des statistiques existantes. Elle a apporté une aide considérable aux autres ministères de tous les niveaux administratifs, aux groupes d'études ou autres dans l'analyse de nouveaux projets de sécurité sociale, l'étude des besoins en logements à loyer modique, l'évaluation du rapport de la Commission royale d'enquête sur la situation de la femme et de nombreux autres travaux.

Division de l'éducation

L'année dernière, la Division a précisé et concretisé ses nouvelles orientations grâce à une nouvelle structure organisationnelle, de nouvelles enquêtes, l'élargissement et la perfectionnement de séries chronologiques, la mise au point de systèmes mécanographiques intégrés d'information, la production de publications régionales, la réalisation d'autres projets spéciaux, la présentation de multiples documents d'analyse, de commentaires et d'interprétations, et enfin l'amélioration quantitative et qualitative des publications.

Les structures de la Division ont été établies sur un axe vertical comportant des sections qui s'occupent des étudiants, des enseignants, des finances, etc.

Chaque section réunit et publie des données annuelles sur les secteurs primaire, secondaire et universitaire.

La Division a entrepris de nouvelles enquêtes statistiques, notamment sur le transport scolaire, l'utilisation des médias, les dépenses des Canadiens et sur les dépenses des familles. La Division a poursuivi ses travaux relativement à l'enquête sur l'alimentation au Canada et elle a établi les bases de nouvelles enquêtes pour 1972-73.

Dans le cadre de l'enquête sur la population active, la Division s'est occupée non seulement de recueillir des données, mais elle a également effectué un sondage mensuel destiné à mettre à l'épreuve des techniques et méthodes pour choisir les 30,000 ménages de l'échantillon afin que ce dernier représente bien les caractéristiques géographiques et socioéconomiques de la population.

Dans le cadre du programme permanent de l'indice des prix à la consommation, la Division des opérations régionales a principalement fait porter ses efforts sur la production future de statistiques fiables relatives aux prix moyens. Elle a également recueilli des données auprès des chaînes d'alimentation afin de perfectionner les échantillons des points de ventes. Elle a également entrepris d'autres projets, notamment une enquête sur les impôts fonciers, et l'élargissement de l'échantillon sur les prix industriels afin d'inclure la construction résidentielle nouvelle.

Une enquête comparative sur le coût de la vie a été effectuée simultanément à Halifax et Ottawa afin d'établir les différences de la hausse des prix alimentaires entre ces deux villes. Une autre enquête sur tous les éléments qui composent l'indice des prix à la consommation a eu lieu à Vancouver et Prince Rupert, ces deux lieux à Vancouver et Prince Rupert, ces deux villes se partageant entre elles les frais de l'enquête.

En plus de sa participation à l'enquête permanente sur les postes vacants, la Division a collaboré à un certain nombre de travaux spéciaux, notamment l'enquête sur les salaires, plote sur la profession des salariés avec le recensement.

Dans le domaine des enquêtes courantes auprès des entreprises, la Division a recueilli pendant l'année environ 50,000 déclarations, soit 15 à 35 % pour une enquête postale donnée.

La Division, qui était également responsable de toutes les opérations régionales du recensement de 1971, a recueilli des données de six millions de ménages et 400,000 exploitations agricoles et établi une liste de 500,000 établissements de gros, de détail de services.

En octobre 1971, certaines activités de nature censitaires sont passées de la Division du recensement à celle des opérations régionales: cette dernière a donc été amenée à participer à l'élaboration de méthodes détaillées, de programmes de formation, de plans ou procédures logistiques pour plus de 45,000 personnes participant à la collecte des données du recensement.

Division des opérations régionales

Cette Division a remplace l'ancienne Division des enquêtes spéciales; ses fonctions ne consistent plus seulement à recueillir des données pour quelques grandes enquêtes importantes, telles que l'enquête sur la population active, mais aussi à effectuer plus d'enquêtes permanentes.

Afin de répondre aux demandes accrues de statistique adressées au Bureau, la Division a complété la réorganisation de ses services au cours de l'année 1971-72.

Quatre enquêtes ont été terminées au cours de l'année; elles portaient sur les centres de

Cette Direction s'occupe de séries socio-économiques, démographiques et économiques qui portent sur les individus, les ménages, les familles et les institutions. Sa principale réalisation en 1971-1972 a été le recensement décennal de 1971 (la plus grande enquête sur les ménages jamais effectuée par le Bureau) qui a été couronné de succès. L'enquête, effectuée pour

Division de l'agriculture

Le travail de la Division de l'agriculture consiste à concevoir, appliquer et coordonner un système statistique fournissant des renseignements sur l'agriculture grâce à la publication de rapports annuels, mensuels et saisonniers; en 1971-72, elle a introduit certaines améliorations notables dans son système.

Elle a notamment étendu l'automatisation du traitement et de la planification des données à l'enquête descriptive partielle de juillet 1972. La nouvelle enquête vise à obtenir des renseignements de base et à fournir des données repères plus fréquentes qui seront utilisées pendant l'année lors des enquêtes postales effectuées par les ministères de l'agriculture des provinces en collaboration avec leur homologue fédéral.

En plus de ses travaux statistiques réguliers, la Division a effectué d'autres recherches dans

- Vérification de l'applicabilité de nouvelles techniques et méthodes de collecte des données sur les cultures, notamment en testant auprès des cultivateurs l'utilisation des questionnaires traités à l'aide d'équipement mécanographique;
- Constitution d'un vaste ensemble de données sur différents aspects des industries du bétail et des produits d'origine animale
- Mise au point d'une enquête descriptive destinée à produire des estimations nationales sur le nombre de bestiaux;
- Automatisation d'enquêtes sur les produits afin d'obtenir des renseignements sur les changements structurels des industries du bétail et des produits d'origine animale.
- Extension de l'enquête de l'Alberta sur les bovins engraisés à toutes les provinces des Prairies et à l'Ontario.
- Travaux complémentaires en vue de la publication d'un supplément au *Bulletin statistique sur l'industrie laitière* et rédaction d'un répertoire chronologique des différents produits alimentaires enmagasinés au Canada.

En 1971-72, le calcul des recettes en espèces provenant de l'exploitation agricole est demeuré au premier rang des priorités; il était impérieux d'apporter des changements considérables aux séries existantes afin de présenter les données sous la forme exigée par le Plan de stabilisation du revenu des cultures céréalières.

Dans le cadre du programme de géocodage, les fichiers principaux de 14 grands centres

On a également étudié la possibilité d'utiliser les déclarations d'impôt sur le revenu pour évaluer les recettes et dépenses en espèces dans les exploitants agricoles.

Division du recensement

Les préparatifs du recensement de 1971 de la population, de l'habitation et de l'agriculture, qui ont rempli presque toute la période quinquennale après le recensement de 1966, sont entrés dans leur phase finale dans les premières semaines de l'année financière 1971-72. Cinquante mille employés à temps partiel étaient à pied d'œuvre le 1^{er} juin, jour du recensement. Le traitement régional des données a duré de juin à septembre et a comporté des contrôles quantitatifs et qualitatifs des questionnaires ainsi qu'un certain nombre d'opérations de codification.

À la fin de l'année, on avait terminé le microfilmage, le traitement FOSDIC et le contrôle des formules abrégées et presque toutes les formules longues contenant des renseignements sur l'échantillon.

Les premières publications du recensement de 1971 ont été une série de cinq bulletins préliminaires, rédigés à partir des feuilles de visite, qui donnaient la population des centres urbains municipaux et des autres unités constituées. En outre, *Catalogue du recensement de 1971* énumérait les publications et décrivait brièvement les autres médias appelés à transmettre les résultats du recensement.

Dans le courant de l'année, la Division a arrêté les projets de mise en tableaux et de publication et terminé la plupart des chapitres d'introduction aux rapports et volumes ayant trait au recensement de 1971. Entre autres projets amorcés, mentionnons la mise en tableaux des recherches spécialisées, des travaux de recherche importants ainsi qu'une nouvelle série de rapports analytiques sur les ressources humaines et agricoles du Canada.

Un vaste programme d'évaluation a été mis au point afin d'apprécier divers aspects des méthodes et techniques du recensement de 1971 et d'obtenir des renseignements pour la préparation du prochain recensement.

La description des régions métropolitaines de recensement et des agglomérations de recensement a été définitivement arrêtée et des recherches entreprises afin d'étudier leurs caractéristiques.

Recherches sur les finances des consommateurs

L'enregistrement national.

Au cours de l'année 1971-1972, le Service de recherches sur les finances des consommateurs a rédigé une série de rapports spéciaux d'après les données de l'enquête sur les finances des consommateurs de 1968, qui constituait l'enquête intersectorielle sur le revenu la plus poussée des années 60.

Les rapports portaient sur de nouvelles statistiques du revenu des familles fondées sur la définition de la famille du recensement, sur des répartitions comparatives des revenus en 1965-1967, en 1961 (dollars constants) ainsi que par quintiles, et sur les caractéristiques des familles à faible revenu.

Trois autres rapports spéciaux sont également fondés sur les données de l'enquête de 1968: une étude économétrique sur les revenus

Division de l'agriculture
Division du recensement
Recherche sur les finances des consommateurs
Division de l'éducation

Division des opérations régionales
Division de la santé et du bien-être
Division de la statistique judiciaire
Service de liaison et de consultation
avec les provinces
Le statisticien en chef adjoint
du Canada
L.E. Rowebottom

D'autres séries nouvelles portaient sur les charges fiscales des sociétés sous contrôle étranger et canadien; on a également repris la publication des données sur les paiements versés aux non-résidents. La Division a développé davantage l'analyse et fournit considérablement plus d'informations sur les concepts et la méthodologie utilisés pour la compilation de la série sur la propriété et le contrôle étrangers.

Le numéro de 1969 de la publication *Biennale Liens de parenté entre firmes* a été publié en 1971. Il portait sur les informations non confidentielles exigées par CALURA et indiquait, jusqu'à un certain point, l'importance des relations interentreprises au Canada. Celles-ci sont déterminées en fonction de la propriété de capital-actions déclaré (lorsqu'une corporation détient au moins 10 % des actions donnant droit de vote d'une autre corporation, on considère qu'il y a un "complexe" de propriété). Les corporations déclarantes sont groupées selon leurs complexes respectifs, c'est-à-dire d'autres sociétés et vice versa. Les corporations de non-résidents formellement exemptées de la loi sont identifiées, lorsqu'il y a lieu, comme des déclarations d'impôts sur le revenu des corporations comme source de données pour D'autres projets en cours se traduiront par l'amélioration de la classification industrielle des corporations, des techniques d'échantillonnage et des façons de traiter les fusions, regroupements et autres variations organisationnelles qui influent sur les comparaisons des séries CALURA. Un projet pilote portant sur les 850 corporations les plus importantes a également été entrepris afin d'identifier et de résoudre les problèmes de calendrier, d'homogénéité et de problèmes de calcul.

— la compilation des estimations de l'impôt — Parmi les autres travaux entrepris en 1971-72, mentionnons:

Cette révision des principes fondamentaux des statistiques sur la gestion financière s'est traduite par de nombreuses modifications afin de fournir aux utilisateurs des séries chronologiques homogènes.

— la compilation des estimations de l'impôt — Parmi les autres travaux entrepris en 1971-72, mentionnons:

- la promotion permanente auprès des administrations locales de la mise en application d'un nouveau système type de classification des comptes;
 - l'établissement par la Division d'une série sur l'emploi dans l'administration publique à partir du même univers statistique que celui utilisé pour les recettes, les dépenses, l'actif et le passif de l'administration publique;
 - une étude avec le ministère provincial des Affaires municipales afin d'améliorer les déclarations statistiques et de préparer une enquête visant à identifier les unités administratives dans les principales villes;
 - le développement plus poussé d'un inventaire informatisé permanent des administrations non garanties des administrations publiques locales; et
 - la préparation de données trimestrielles sur la gestion financière.
- En ce qui a trait aux comptes nationaux, le fait marquant de l'année a été l'amélioration des délais dans la compilation des données sur les administrations publiques et des flux financiers les publie sous forme de chiffres préliminaires. Mentionnons aussi un relevé trimestriel des revenus, dépenses et flux financiers des conseils scolaires et des entreprises des administrations publiques.
- La Division a également participé à un certain nombre de rencontres du comité technique du comité fédéral-provincial permanent en matière fiscale et économique. Ces rencontres ont permis de revoir la formule actuelle utilisée pour les calculs des paiements de péréquation aux provinces et de recommander des amendements à la nouvelle Loi sur les arrangements fiscaux entre le gouvernement fédéral et les provinces portant sur la période du 1^{er} avril 1972 au 31 mars 1977.

Cette direction concentre son activité sur deux grands domaines de la statistique financière: un grande variété de données sur les commerces, les entreprises industrielles et les administrations publiques; des données sur le bâtiment et les travaux publics; l'acquisition de biens immobiliers (y compris la formation de capital); l'industrie de la construction; les mises en chantier, les coûts et les caractéristiques

Division des finances des entreprises

La Division des finances des entreprises s'occupe de deux grandes catégories de statistiques: des données sur la situation financière des sociétés; et des données sur la variation de l'utilisation du financement en temps.

En plus d'avoir leur utilité propre, ces données font partie du système des comptes nationaux et de divers modèles économétriques. La Division est responsable de deux publications trimestrielles:

- *Sociétés industrielles - Statistique financière* qui présente des données détaillées sur les activités financières et la situation de 25 grands groupes industriels; et
- *Institutions financières* qui présente des données financières complètes sur un certain nombre d'institutions financières et les intermédiaires.

Des progrès importants ont été réalisés dans les deux cas lorsqu'on a remodèle les questionnaires pour mieux les adapter aux pratiques comptables courantes.

Pour la publication sur les sociétés industrielles, on projette une nouvelle présentation avec une couverture englobant peut-être une quarantaine de groupes industriels au lieu de 25.

La mise à jour du questionnaire sur les institutions financières avait pour but d'améliorer les déclarations sur les liens internes et externes, notamment les mesures des nouvelles activités et la couverture de dix-huit institutions financières définissables ou plus. La Division a également réalisé des progrès considérables dans l'amélioration de la qualité et dans l'élargissement de sa couverture à d'autres secteurs.

Le rapport annuel sur les *Caisse d'épargne et de crédit* a été élargi afin de fournir davantage de détails par province, ainsi que des données sur les finances et les tendances, comparables à celles d'autres institutions financières connexes.

On a continué d'étendre les estimations du flux et des stocks de capital fixe tant pour le secteur manufacturier que non manufacturier. Les estimations du secteur manufacturier ont été révisées, adaptées à la classification type des industries de 1960 et publiées dans *Flux et stocks de capital fixe, industries manufacturières*. Ces estimations couvrent maintenant la période 1926-1969 et sont données en dollars courants, en dollars constants (1949, 1957 et

Cette division est chargée d'administrer, au nom du statisticien en chef du Canada, la Loi sur les déclarations des corporations et des syndicats ouvriers (1962). Cette loi autorise la collecte de données pour l'évaluation de l'importance et des effets de la propriété et du contrôle des corporations canadiennes par des non-résidents ainsi que de l'infirmité des syndicats canadiens à des syndicats internationaux. En vertu des dispositions de la loi, la Division rédige un rapport annuel en deux parties: l'une porte sur les corporations et l'autre sur les syndicats.

En 1965, une modification de la loi a permis d'imposer sur le revenu des corporations. Cela a éliminé pour beaucoup d'entre elles le fardeau d'imposer sur le revenu des corporations. Cela a permis maintenant de préparer des rapports annuels distincts sur les statistiques financières et fiscales des sociétés.

Division CALURA

La qualité et le calendrier des statistiques sur les permis de construction ont été améliorés au cours de l'année grâce à la révision des programmes informatiques. Les utilisateurs pourront désormais se procurer des données cumulatives et courantes par province, subdivision de recensement, région métropolitaine et municipalité et établir des comparaisons avec les données de la loi. Le programme a également été conçu de manière à permettre des analyses régionales et à mesurer la construction non-résidentielle.

La Division a achevé un nouveau questionnaire adapté au système comptable des services d'électricité et l'a inauguré lors de la collecte des données de 1970; elle a aussi publié pour la première fois des estimations distinctes pour le Yukon et les Territoires du Nord-Ouest. L'enquête détaillée de l'industrie de la construction entreprises en 1967 s'est poursuivie. Les deux premières publications de cette série (*Les entreprises d'installations mécaniques et les entreprises d'installations électriques*) paraissent maintenant chaque année. Un recensement annuel du troisième groupe (construction de ponts et de voies publiques) a été préparé au cours de l'année et des recherches préliminaires ont été entreprises avant l'inauguration en 1972 d'un recensement du quatrième groupe (entreprises généraux de construction non-résidentielle).

1961) et au prix de revient initial. On a ébauché certains travaux pour déterminer la possibilité de préparer d'autres estimations détaillées par industrie et par région dans ce secteur.

Au cours de l'année, on a surtout essayé d'améliorer l'homogénéité, la couverture et le calendrier des données et de préparer une série statistique sur les grands groupes industriels de l'industrie de la construction.

À titre de priorité additionnelle, on a entrepris le jumelage de la statistique de la production et de la statistique financière en collaboration avec la Direction de la statistique

économique afin d'améliorer la qualité des données et de réduire le fardeau des recensements.

Division des finances des entreprises
Division CALURA
Division des administrations publiques
G.A. Wagdin
Directeur général

Des améliorations considérables ont été apportées à la partie I du rapport annuel 1971-72, le travail s'est poursuivi sur le rapport CALURA mais assujetties à la Loi de l'impôt sur le revenu. On a pu ainsi améliorer considérablement l'évaluation de l'importance relative des sociétés appartenant à des étrangers ou à des Canadiens.

Le champ statistique a également été élargi par l'introduction de données financières sur les corporations de la Couronne appartenant aux administrations fédérales, provinciales et municipales et qui ne sont pas assujetties à la Loi de l'impôt sur le revenu. On y a englobé pour la première fois, des informations sur la propriété des grandes corporations non assujetties à cette loi et exploitant des industries non financières.

Le premier rapport sur les postes vacants a été publié en décembre 1971; il a fourni de nouvelles informations sur les demandes non satisfaites de la main-d'œuvre sous forme de statistiques de la main-d'œuvre sous forme de statistiques trimestrielles des postes vacants classées par profession, région et activité économique. La section de l'enquête sur la population active a augmenté substantiellement sa publication mensuelle, *La main-d'œuvre*, et réduit de deux jours complets le délai entre la collecte et la parution des informations statistiques. Elle a également rédigé une publication spéciale, *Données sur le chômage* qui traite de divers aspects du chômage au Canada.

Les recherches de la Division du travail ont été considérablement élargies au cours de l'année grâce à l'intégration du personnel de la main-d'œuvre spéciale qui était attaché auparavant à la Direction de l'intégration et du développement.

On a entrepris un certain nombre de travaux de recherche afin de mieux comprendre le comportement du marché du travail; ils couvrent des sujets tels que les méthodes de recherche d'un travail, la participation des jeunes à la population active, les longues horaires de travail (y compris le temps supplémentaires et les détenteurs d'emplois multiples) et la composition des chômeurs.

On a entrepris des études et des recherches sur les concepts utilisés dans l'enquête sur la population active et on a passé en revue les possibilités de préciser davantage les questions afin d'améliorer la qualité des données recueillies.

En ce qui a trait aux travaux de développement, on a poursuivi le travail d'analyse des problèmes que posent les estimations des professions des salariés; vers la fin de l'année un projet d'enquête à ce sujet a été approuvé. Enfin, on a poursuivi la mise au point d'un système national de statistiques sur les actifs du travail.

Division des industries manufacturières et primaires

Cette Division est chargée de rassembler des données sur la fabrication, l'exploitation forestière, la pêche et l'énergie.

Au cours de l'année, elle a cherché considérablement à améliorer la collecte, ainsi que la qualité et le calendrier des données produites. Une étude entreprise l'année précédente conjointement par Statistique Canada et l'Institut canadien des comptables agréés, s'est traduite par la restructuration du questionnaire du recensement des manufactures qu'on a testé auprès d'un grand nombre d'entreprises à établissements multiples.

On a réussi à réduire considérablement, jusqu'à six semaines dans certaines enquêtes, le temps nécessaire pour recueillir les données du recensement annuel des manufactures. Toutefois, certains délais se sont produits dans l'exploitation des données. L'utilisation plus fréquente d'un questionnaire abrégé destiné aux petites entreprises, a réduit la tâche de ces enquêtes sans perte substantielle d'information. De nouvelles possibilités informatiques ont permis à la Division de répondre plus facilement et plus rapidement aux besoins en données pour de petits secteurs et de publier des chiffres préliminaires; elles ont notamment servi à répondre à une demande importante du MEEB et à améliorer le calendrier des données primaires en général.

— mise à jour du programme des publications courantes;

— planification du recensement de 1971; — préparation de nouvelles enquêtes portant sur les entreprises d'hébergement, les concessions et les établissements de restauration;

— préparation d'un nouveau programme de production et de distribution de films.

Toujours dans le secteur des services, l'enquête sur les hôtels a été élargie afin d'englober, pour la première fois, les motels, les camps pour touristes, les cabines et les autres logements. Les résultats en étaient à divers stades de publication à la fin de l'année.

En janvier 1971, on a choisi un nouvel échantillon mensuel des entreprises de restauration afin d'obtenir des données qui n'étaient pas disponibles auparavant sur les rentées de divers genres de restaurants notamment les établissements industriels et les établissements de repas à emporter.

Au niveau du commerce de gros, on a poursuivi les travaux relatifs au recensement de 1971. Comme ce travail venait en priorité, aucune enquête n'a été menée en 1970.

Un nouveau projet de la Division est l'enquête nationale sur la vente de moteurs diesel qui remplacera les enquêtes provinciales semblables menées par le Québec, l'Ontario, les Prairies et la Colombie-Britannique.

De nouveaux travaux ont été entrepris pour élargir la couverture du secteur des services:

— présentation des tableaux.

Au niveau du commerce de gros, on a poursuivi les travaux relatifs au recensement de 1971. Comme ce travail venait en priorité, aucune enquête n'a été menée en 1970.

Un nouveau projet de la Division est l'enquête nationale sur la vente de moteurs diesel qui remplacera les enquêtes provinciales semblables menées par le Québec, l'Ontario, les Prairies et la Colombie-Britannique.

De nouveaux travaux ont été entrepris pour élargir la couverture du secteur des services:

A la fin de l'année, on avait presque terminé la rédaction d'une classification type des produits industriels et on a entrepris le codage du questionnaire de 1972 de quatre des cinq sections terminées.

Parmi les nouveaux projets importants, mentionnons une étude détaillée des effets des concepts de l'entreprise de rechange, des travaux préliminaires sur les rapports de concentration et les données connexes des entreprises manufacturières, une recherche complète sur la stabilité à long terme de la part du marché des entreprises dans certaines activités économiques, et l'analyse de la courbe de croissance de l'emploi dans l'industrie de la fabrication par comité et division de recensement.

Division du commerce et des services

Cette Division recueille des données sur les prix de détail, le coût de la vie et les prix industriels. Elle mesure les mouvements des prix de détail et les variations des prix en fonction de l'évolution du coût de la vie et du revenu réel des groupes de population à l'intérieur du Canada ou entre le Canada et d'autres pays. Elle mène également des enquêtes sur le budget des familles et fait des études statistiques sur les dépenses des divers genres de familles.

Pour ce qui est des prix industriels, la Division mesure les mouvements des coûts de production et de distribution des marchandises et services en s'intéressant surtout au prix de la production et des facteurs de production de chaque entreprise.

Division des prix

La qualité et l'utilité des statistiques sur le crédit à la consommation ont fait l'objet d'une étude approfondie. En octobre, on a publié les données de 1971 (révisées en fonction des données-repères des recensements de 1961 et 1966) sur le crédit exigible des grands magasins pour meubles, téléviseurs, appareils ménagers et "toutes autres marchandises".

Pour compléter les statistiques sur le crédit, de nouvelles données sur la location de voitures, les transports, les voyages et les loisirs ont été ajoutées aux données des sociétés pétrolières (essence). Une autre classe de créanciers (services publics tels que les sociétés de téléphone, de gaz et d'électricité) ont également fait l'objet d'enquêtes.

Cette Division recueille des données sur les prix de détail, le coût de la vie et les prix industriels. Elle mesure les mouvements des prix de détail et les variations des prix en fonction de l'évolution du coût de la vie et du revenu réel des groupes de population à l'intérieur du Canada ou entre le Canada et d'autres pays. Elle mène également des enquêtes sur le budget des familles et fait des études statistiques sur les dépenses des divers genres de familles.

Pour ce qui est des prix industriels, la Division mesure les mouvements des coûts de production et de distribution des marchandises et services en s'intéressant surtout au prix de la production et des facteurs de production de chaque entreprise.

En 1971-1972, elle a publié un nouveau bulletin de service intitulé *Prix de détail et coût de la vie* afin de fournir des renseignements rapides sur les dépenses des familles, les prix à la consommation, et le coût comparatif de la vie au niveau national et international; le bulletin renferme aussi des articles et tableaux spéciaux qui ne pourraient pas être publiés autrement.

En ce qui a trait aux indices des prix à la consommation, on a continué la mise à jour de la structure de la pondération des indices du Canada et des régions urbaines en utilisant les caractéristiques des dépenses des familles de 1967 et les données de l'enquête de 1969 sur les dépenses en aliments. On a également poursuivi le travail sur un projet visant à établir et publier le prix de détail moyen d'un grand nombre d'articles bien définis des supermarchés. Des études distinctes ont été entreprises afin d'améliorer l'échantillon des points prises afin d'améliorer l'enquête sur les consommations dans les indices des prix à la consommation.

La Division a encore amélioré et étendu les mesures comparatives des prix de détail d'un endroit à l'autre et étudié les différences de prix de détail entre Prince-Rupert et Vancouver en vertu d'un programme conjoint de partage des coûts. La mise à jour de l'étude des différences de prix de détail dans onze villes afin d'éliminer les écarts entre les statistiques antérieures sur Saint-Jean (T.-N.) et Saint-Jean (N.-B.) a progressé.

Le nombre des postes isolés où on a révisé les prix de détail et les conditions du coût de la vie a été augmenté et on a analysé les résultats des enquêtes menées à divers endroits de la côte ouest de la Colombie-Britannique, au Yukon, dans la région du fleuve Mackenzie, à Froebisher et à Terre-Neuve.

Cette direction prépare des statistiques se rapportant aux principaux secteurs industriels de l'économie, industries primaires (sauf l'agriculture), transports et services d'utilité publique. Les données proviennent des établissements des sociétés (production, ventes et services) au moyen de certaines d'enquêtes postales mensuelles, trimestrielles et annuelles, et de quelques enquêtes par agent recenseur.

Division du commerce extérieur

Dans le cadre de son programme actuel de préparation de données sur le commerce du Canada avec l'étranger, cette division publie des rapports mensuels, trimestriels et annuels sur les exportations et les importations sous forme de tableaux et classements divers. Elle prépare également, contre remboursement, une série de tableaux spéciaux.

Au cours de 1971-72, elle a entrepris, de concert avec le ministère du Revenu national (Douanes et Accise) un programme d'automatisation des données sur les importations qui était à demi-complète à la fin de l'année. Elle s'occupe également de la préparation d'un système parallèle pour les exportations. Ces travaux ont permis de fournir aux utilisateurs des arrangements de données considérablement améliorés; le ministère des Finances, la Banque du Canada et Air Canada ont obtenu des données plus précises et d'autres arrangements gouvernementaux ainsi que des utilisateurs industriels se montrent également intéressés.

Il convient de souligner la création au cours de l'année de la Classification canadienne pour le commerce international, Index des marchandises, qui fait partie intégrante du projet d'automatisation. Ce nouvel index permettra à la division de recueillir des données plus détaillées sur les importations et d'aider le ministère du Revenu national à affiner les paramètres pour le contrôle informatique. Il a été conçu de manière à pouvoir s'appliquer ultérieurement aux exportations aussi bien qu'aux importations; il contient 15,000 produits distincts qui se rattachent au commerce international du Canada.

Parmi les autres grands projets en 1971-72, mentionnons la mise sur pied d'un programme conjoint avec le ministère du Commerce des États-Unis visant à reconnaître et à corriger les grands écarts qui existent entre les méthodes de deux pays pour mesurer leurs importations et exportations. À cet effet, un comité États-Unis-Canada de la statistique commerciale a été créé sous la direction conjointe du secrétaire aux affaires économiques des États-Unis et du statisticien en chef du Canada.

Parmi les problèmes que le comité doit étudier, il y a les différences dans les sous-déclarations, concepts et évaluations et les moyens de pondérer quantitativement chacune; il doit aussi trouver et évaluer les parties de l'univers des produits où ces différences se retrouvent le plus souvent et en plus grand nombre.

Comme nos deux pays utilisent maintenant l'informatique pour la comparaison systématique des données, il semble désormais possible de rapprocher les deux ensembles de données.

Recherche et développement en entrées-sorties

D'autres données proviennent des dossiers administratifs. En général, le travail de cette direction tend à se concentrer sur les données relatives à la production ou à la vente de biens et services, aux matériaux utilisés, à l'emploi, aux prix, aux importations et aux exportations.

Division du commerce extérieur

Recherche et développement en entrées-sorties

Ce projet a eu deux grandes répétitions sur la préparations des tableaux annuels des entrées-sorties: le rapprochement entre les comptes des revenus et dépenses et les tableaux des entrées-sorties a été grandement facilité; cependant, la préparation de tableaux annuels des entrées-sorties a été retardée.

Dans les services de l'analyse et du service-chronologique des Comptes nationaux des revenus et dépenses, on signale un certain nombre de réalisations. Beaucoup d'organismes publics et privés se sont abondamment servis des données et des modèles des prix. Plus de deux cents simulations ont été effectuées avec succès sur les modèles des sorties pour vingt organismes différents. Le modèle des prix a été utilisé pour cinquante simulations par quatre organismes. De nombreuses améliorations ont été apportées aux modèles dont la plus importante a été la mise au point d'un modèle des sorties fermé pour les dépenses des consommateurs.

On a conçu et testé une nouvelle méthodologie sur un modèle à petite échelle rédigé selon le langage machine APL. Cette méthodologie vise à introduire des restrictions de capacité sur les niveaux d'activité du modèle de sortie et à jumeler les prix et les modèles de sortie.

Le personnel du service des entrées-sorties a continué de participer activement à la construction du modèle "CANDIDE", programme inter-ministériel qui groupe des membres du Conseil économique du Canada, des ministères de l'Expansion économique régionale, de la Main-d'œuvre et de l'Immigration, des Finances, de la Banque du Canada et de Statistique Canada. Au début de 1972, on en a terminé la première version connue sous le nom de CANDIDE,

Division du travail

annuel à moyen terme.

La Division du travail s'occupe des statistiques sur la population active, l'emploi, le chômage, les revenus de la main-d'œuvre, les coûts de main-d'œuvre et la charge des employés, la profession des salariés, les postes vacants, les régimes de pension ainsi que des données sur les activités de la Commission d'assurance-chômage et des Centres de main-d'œuvre et de l'Immigration.

Division du travail
primaires
Division des industries manufacturières et Division des prix
Division des transports et des services
d'utilité publique
Directeur général
V.R. Borlinghette

Au cours de l'année, elle a adopté un nouveau système pour la préparation d'estimations sur l'emploi dans les petits établissements. Après avoir publié en 1970-71 les résultats d'une vaste enquête sur certains coûts de main-d'œuvre à la charge des employeurs, on a préparé des enquêtes semblables afin d'obtenir par rotation des données sur les éléments de la rémunération d'autres branches d'activité. Ainsi, l'enquête de 1971 portait sur les finances, les assurances et les affaires immobilières, les transports, les communications et d'autres services d'utilité publique. Quant à l'enquête de 1972, elle a porté de nouveau sur l'industrie manufacturière, et, pour la première fois, sur les forêts.

En ce qui concerne l'enquête annuelle sur les gains et la durée du travail dans l'industrie manufacturière qui a permis d'obtenir des données distinctes pour les employés (seule source de données sur les gains courants des femmes au Canada) on projette de recueillir des données semblables auprès d'autres branches d'activité, en particulier auprès du secteur des services.

Faits saillants des autres activités:

— Comme la Loi de 1971 sur l'assurance-chômage couvre tous les travailleurs rémunérés, on prépare un programme visant à fournir des statistiques sur les activités de la Commission en vertu de la nouvelle loi.

— Un nouveau système informatique sur les pensions a été mis au point afin de fournir un dossier actuel et constamment à jour sur les dispositions, conditions, adhésions et contributions relatives à environ 85 % de tous les régimes de pension professionnels au Canada. Ce nouveau programme est une réalisation importante dans le domaine des systèmes de données sur les pensions; il a été rendu possible grâce à la collaboration des responsables des pensions du Québec, de l'Ontario, de la Saskatchewan et de l'Alberta, de même que de la division fédérale de l'assurance. Leurs ressources ont été groupées en un seul système coopératif de collecte, d'agglomération et d'information statistique, fondé sur les dossiers administratifs. Un système spécial d'extraction permet un accès souple et rapide au dossier des données.

Division de la production et de la productivité nationale

Cette Division publie les indices mensuels, trimestriels et annuels du produit intérieur réel, de ses principaux éléments tel que l'indice de la production industrielle pour un grand nombre de branches d'activité. Plus de 120 indices paraissent chaque mois; les chiffres annuels sont beaucoup plus détaillés.

Les révisions de 1968 à 1971 ont parues en août 1971 et on a continué la publication des données annuelles sur la valeur ajoutée en dollars courants pour les industries productrices de biens de chaque province.

Les programmes de recherche commerciale, des études-pilotes sur la production, certains éléments des industries non commerciales, la mise au point d'indices de production brute et la préparation de documents de référence sur les concepts, les méthodes et les sources.

On a également progressé en ce qui a trait à la préparation de mesures trimestrielles de la productivité et des mesures annuelles du coût unitaire de la main-d'oeuvre.

Service des séries chronologiques générales

Ce service se consacre à trois grandes activités:

- La préparation, la mise en application et la direction du CANSIM (banque de données mécanographiques des séries chronologiques du Bureau).
- Des recherches appliquées et la conception ou d'autres ajustements dans l'analyse des séries chronologiques.

Dans la série des études détaillées de la productivité par branche d'activité, les rapports publiés au cours de l'année ont porté sur les raffineries de pétrole, les cimenteries et les raffineries de sucre. À la fin de l'année, on a de téléviseurs et sur certaines industries productrices d'aliments et de boissons. L'établissement d'estimations de la productivité pour tous les grands groupes manufacturiers est également très avancé.

— La publication mensuelle de la Revue statistique du Canada et de ses suppléments.

Au cours de l'année, on a accéléré la recherche pour trouver d'autres méthodes de désaisonnalisation.

L'intérêt que suscite CANSIM s'est considérablement accru et la vente des bandes de la Revue statistique du Canada a plus que doublé; l'efficacité opérationnelle a beaucoup progressé grâce à un meilleur système d'extraction.

Des documents CANSIM ont été distribués à une quarantaine d'universités canadiennes; des colloques ont eu lieu aux universités du Manitoba et du Nouveau-Brunswick avec la participation des universitaires et des représentants des gouvernements provinciaux.

On a pris des dispositions pour transférer la base de données CANSIM et les programmes du système au Bureau des services d'information de l'administration fédérale. Au début, seuls les organismes gouvernementaux y auront accès.

Des représentants du Bureau central national de statistique ont visité des fonctionnaires du CANSIM pour se faire aider à mettre au point la base SWESIM.

Partie 1: La production statistique

Direction des comptes économiques

Cette direction est responsable au premier chef des principaux comptes rendus et indicateurs économiques produits par le bureau, lesquels forment l'assise statistique du système unifié des comptes nationaux. Elle élabore et exploite de plus un système informatique de stockage, d'extraction et de diffusion des données (CANSIM ou système canadien d'information socio-économique). Ses activités s'étendent à :

la production de statistiques économiques et de tous ceux qu'intéressent les phénomènes économiques.

Division de la balance des paiements et des flux financiers

Division du revenu national et de la dépense nationale

la production et de la productivité nationales

Séries chronologiques

général

E. Bower Carly

Division de la balance des paiements et des flux financiers

Cette division est chargée de la collecte, de l'analyse et de la publication de données

sur la balance des paiements, estimations qui rendent compte des opérations de compte de capital et de compte courant entre le Canada et les autres pays.

sur les flux financiers dont les comptes nationaux et les comptes de l'économie canadienne et décrivent les mouvements de fonds entre les divers secteurs et sur les voyages internationaux qui comprennent les voyages des Canadiens à l'étranger et des non-résidents au Canada.

Dans le cadre de ses activités relatives à la statistique des placements internationaux, la division a publié cette année un important recueil de données mises à jour, corrigées et complètes sur la balance canadienne des placements internationaux de 1926 à 1969, accompagnées de mesures agrégatives de cette même période. Elle a de plus effectué une étude du secteur des emprunts et des prêts.

La division est demeurée en contact étroit avec l'Office of Business Economics des États-Unis afin de déterminer la cause des contradictions entre les données canadiennes et américaines sur le commerce entre les deux pays. Au Canada même, elle a démarré conjointement

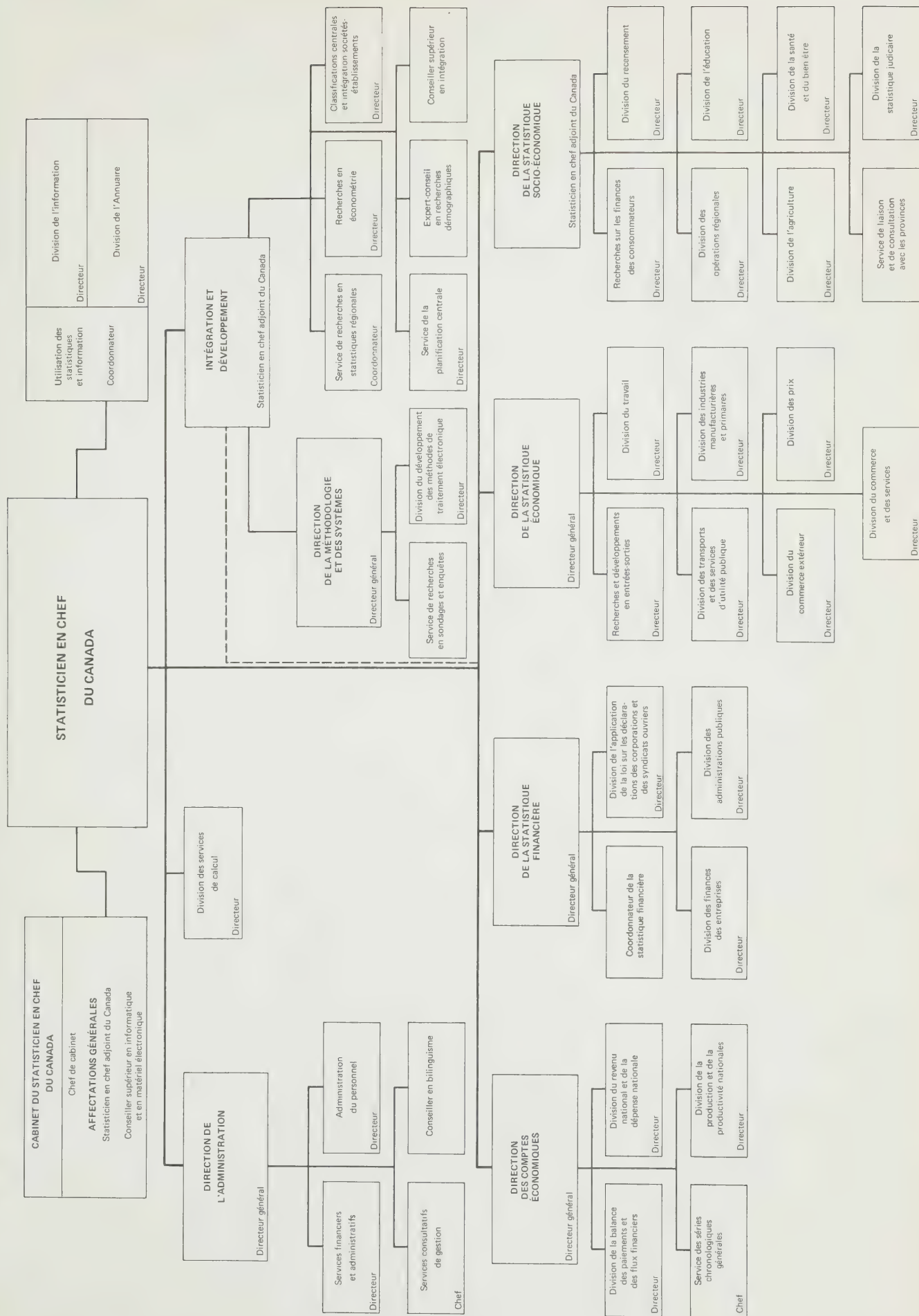
La mise en place d'un système automatisé pour la production des données sur les flux financiers a beaucoup progressé au cours de cette année. La division a de plus inauguré à titre expérimental un service de diffusion hâtive des données statistiques de base.

La division a procédé à une révision des ensembles statistiques sur les voyages internationaux en établissant de nouvelles formules, un système centralisé de traitement et un échantillonnage restreint aux principaux points d'entrée.

Le calendrier des données économiques et financières a été révisé en 1970 à la suite de la publication de la *Comptes du revenu national et de la dépense nationale*, on a révisé les séries chronologiques détaillées de 1926 à 1968 qui avaient été diffusées précédemment sous forme d'imprimés d'ordinateurs provisoires.

On a amélioré la méthodologie de nomination des importations au cours des phases ultérieures d'un programme global de révision remontant à 1947.

Le calendrier des comptes trimestriels adopté en 1970 a été maintenu en 1971.



Faits saillants

Système statistique national, 1971-72

- L'année financière close le 31 mars 1972 a marqué une étape très importante dans l'établissement d'un système statistique centralisé au Canada. Une nouvelle loi sur la statistique (Statuts du Canada de 1971, chapitre 15) sanctionnée le 11 février 1971 et promulguée le 2 mai 1971, a accru de beaucoup l'autorité du Bureau fédéral de la statistique (désormais appelé Statistique Canada) en tant qu'organe central de système statistique national.
 - Une loi a aussi fourni une assise législative plus solide pour coordonner et intégrer les activités des organismes statistiques provinciaux et de Statistique Canada.
 - La loi a de plus habilité Statistique Canada à faire usage des dossiers administratifs d'autres ministères fédéraux, notamment des registres fiscaux du ministère du Revenu national, afin d'enrichir les bases de données du bureau et de dispenser le secteur privé d'avoir à faire deux fois un certain nombre de déclarations.
 - Cette année restera également mémorable du fait que pour la première fois, dans le cadre du onzième recensement décennal, on a eu recours à l'autodénombrement pour presque toute la population sauf 3 % des Canadiens qui habitent des régions isolées ou demeurent dans des institutions.
- Cette année, on a aussi consacré beaucoup d'efforts
- à l'utilisation optimale du potentiel informatique,
 - à la préparation et l'accessibilité de données sur de petites régions,
 - à l'étude de la praticabilité d'établir une série d'indicateurs sociaux et ambients et à l'accroissement des activités du bureau relatives aux utilisateurs actuels et possibles des données et des services de publication afin qu'ils devancent plutôt qu'ils ne reflètent les besoins statistiques.
- Les pages qui suivent décrivent la structure administrative et les principales réalisations de Statistique Canada en 1971-72.

Avant-propos

La structure d'un organe statistique central dans un pays industrialisé et moderne est inévitablement complexe et doit faire l'objet à intervalles réguliers d'une réorganisation visant à l'adapter aux besoins et aux méthodes statistiques en constante évolution.

Constitué en organisme public distinct en 1966, Statistique Canada a à sa tête le statisticien en chef du Canada secondé par trois adjoints.

Pendant l'année financière 1971-72, Statistique Canada se composait de cinq groupes qui centralisaient l'administration et les services de l'ensemble du bureau et de quatre grandes directions spécialisées groupant vingt et une divisions et chargées chacune d'un secteur statistique important.

Pour faciliter sa consultation, nous avons divisé ce rapport en deux parties. Dans la première, nous passons en revue la production statistique des directions spécialisées et dans la seconde, nous décrivons les activités des groupes d'administration et de services.

* Le bureau, qui s'appelait auparavant Bureau fédéral de la statistique, porte maintenant officiellement le nom de Statistique Canada en vertu de la Loi sur la statistique (Statuts du Canada de 1971, chapitre 15) sanctionnée le 11 février 1971. L'adoption de ce nouveau nom a été retardée jusqu'en août 1971 pour éviter toute confusion dans l'esprit du public puisque la désignation antérieure figurait sur les documents du recensement de 1971.



Table des matières

Page	Faits saillants	Organigramme
5	.....	.....
6	.....	.....
Partie 1 : La production statistique		
7	Direction des comptes économiques	.....
7	Division de la balance des paiements et des flux financiers	.....
7	Division du revenu national et de la dépense nationale	.....
7	Division de la production et de la productivité nationale	.....
8	Services des séries chronologiques générales	.....
9	Direction de la statistique économique	.....
9	Division du commerce extérieur	.....
9	Recherche et développement en entrées-sorties	.....
9	Division du travail	.....
10	Division des industries manufacturières et primaires	.....
10	Division des commerces et des services	.....
10	Division des prix	.....
11	Division des transports et des services d'utilité publique	.....
13	Direction de la statistique financière	.....
13	Division des finances des entreprises	.....
13	Division CALURA	.....
14	Division des administrations publiques	.....
15	Direction de la statistique socio-économique	.....
15	Division de l'agriculture	.....
15	Division du recensement	.....
15	Recherche sur les finances des consommateurs	.....
16	Division de l'éducation	.....
16	Division des opérations régionales	.....
17	Division de la santé et du bien-être	.....
17	Division de la statistique judiciaire	.....
17	Service de liaison et de consultation avec les provinces	.....
Partie 2 : La gestion centrale et les groupes de services		
19	Intégration et développement	.....
19	Classification centrale et intégration société-établissements	.....
19	Planification	.....
19	Expert-conseil en recherche démographique	.....
19	Service de recherches en économétrie	.....
19	Statistique régionale	.....
20	Conseiller supérieur en intégration	.....
21	Direction de la méthodologie et des systèmes	.....
21	Division du développement des méthodes de traitement électronique	.....
21	Service de la méthodologie des enquêtes économiques et financières	.....
21	Service de la méthodologie des enquêtes socio-économiques	.....
22	Service de développement des enquêtes spéciales	.....
23	Utilisation des statistiques et information	.....
23	Division de l'information	.....
23	Promotion de l'information statistique	.....
23	Division de l'annuaire du Canada	.....
24	Direction de l'administration	.....
24	Conseiller en bilinguisme	.....
24	Services financiers et administratifs	.....
24	Administration du personnel	.....
24	Division du traitement des données	.....
25	Services consultatifs de gestion	.....



**Rapport annuel
de Statistique Canada**
Année financière close le
31 mars 1972

1-0000-502 Catalogue 11-201, décembre 1972
Information Canada, Ottawa





1972-73

Rapport annuel

pour l'année financière close le 31 mars



Statistique Canada Statistics Canada

1972-73

Rapport Annuel
de
Statistique Canada

Année financière close le 31 mars

1-0000-502

Catalogue 11-201

Décembre 1973

Information Canada,

Ottawa

Table des matières

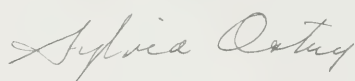
L'honorable Alastair Gillespie, C.P.
Ministre de l'industrie et du commerce
Ottawa, Canada

Monsieur le Ministre,

J'ai le plaisir de vous soumettre le rapport
annuel sur l'activité de Statistique Canada
durant l'année financière close le 31 mars 1973.

Veuillez agréer, Monsieur le Ministre, l'expres-
sion de mes sentiments respectueux.

Le statisticien en chef du Canada



Introduction	4
Partie 1: Les groupes producteurs de données	
Direction des comptes économiques	5
● Division de la balance des paiements et des flux financiers	5
● Division des analyses de conjoncture	5
● Division du produit national brut	6
● Division du produit industriel	6
Direction de la statistique économique	7
● Division du commerce extérieur	7
● Division du travail	8
● Division de l'enquête sur la population active	8
● Division des industries manufacturières et primaires	8
● Division du commerce et des services	9
● Division des prix	10
● Division des transports et des communications	11
● Division des entrées-sorties	12
Direction de la statistique financière	13
● Division des finances des entreprises	13
● Division de la finance publique	14
Direction de la statistique socio-économique	15
● Division de l'agriculture	15
● Secteur du recensement	16
● Division du revenu et des dépenses des consommateurs	17
● Division de l'éducation, des sciences et de la culture	18

● Division des opérations régionales	18
● Division de la santé et du bien-être	19
● Division de la statistique judiciaire	20
● Assistance-utilisateurs	20

Partie 2: Groupes de gestion et de services centraux

Services d'intégration et de développement	21
● Division des profils et des registres d'entreprises	21
● Expert-conseil en recherche démographique	22
● Division de la recherche et du développement en statistiques régionales et urbaines	23
● Bureau du conseiller supérieur en intégration	23
Direction de la méthodologie et des systèmes	24
● Division des systèmes informatiques	24
● Service des méthodes d'enquêtes "entreprises"	25
● Service des méthodes de recensement et d'enquêtes "institutions"	25
● Service d'élaboration d'enquêtes "ménages"	26
Services d'information	28
● Division de l'information	28
● Bibliothèque	28
● Division de l'Annuaire du Canada	28
Direction de l'administration	30
● Services financiers et administratifs	30
● Division de la planification et de l'ordonnancement de la production	31
● Administration du personnel	31
● Division du traitement des données	32

Introduction

L'année 1973 a été pour Statistique Canada une année de réorganisation. L'objet de cette réorganisation était de faire du bureau une source centrale de renseignements statistiques plus efficace et plus apte que par le passé à répondre aux besoins statistiques de la nation.

La réorganisation du bureau a fait suite à une étude exhaustive de l'appareil statistique canadien, entreprise après l'approbation par le Parlement, en 1971, d'une nouvelle Loi sur la statistique qui changeait, entre autres, l'appellation de Bureau fédéral de la Statistique, sous laquelle le bureau avait été désigné depuis sa création en 1918, en Statistique Canada.

Six nouveaux statisticiens en chef adjoints et deux directeurs généraux ont été nommés à la tête des secteurs clés de la nouvelle organisation. Ils relèvent directement du statisticien en chef du Canada et forment avec lui le Comité exécutif du bureau.

Voici un aperçu des nouvelles fonctions de Statistique Canada:

Le secteur Entreprises est chargé de la production de données statistiques sur les prix, le travail, le commerce extérieur, l'agriculture, les transports et les communications, la construction, les industries primaires et manufacturières et les services.

Le secteur Ménages et institutions produit les

statistiques relatives à la santé, au bien-être, à la criminalité, à l'éducation, à la science, à la culture, aux finances publiques, au revenu et dépenses des consommateurs, à l'emploi et au chômage; il élabore de nouvelles statistiques sociales.

Le secteur Comptes économiques et intégration est responsable du système canadien des comptes nationaux (y compris le produit national brut et la balance des paiements) et produit des statistiques sur le contrôle et les capitaux étrangers et sur la production; il élabore des tableaux des entrées-sorties industrielles, analyse la conjoncture économique, opère l'intégration statistique et s'occupe de la recherche en statistique urbaine et des petites régions.

Les Services statistiques collaborent à la collecte et à la compilation des données; ils s'occupent notamment de la méthodologie des enquêtes, du déroulement des enquêtes sur le terrain et de l'exploitation des données.

Le secteur Diffusion et promotion fait connaître l'information statistique et en encourage l'utilisation.

Le secteur Recensement exécute les recensements quinquennaux et décennaux et publie l'information démographique ainsi recueillie.

La Direction de l'administration s'occupe des

finances, du personnel et de l'ordonnement de la production.

La Direction de la politique, de la planification et de l'évaluation est responsable de la planification générale et à moyen terme, ainsi que de la prévision et de l'évaluation des programmes, et conseille en matière de priorités statistiques.

Partie 1 : Les groupes producteurs de données

Direction des comptes économiques

Cette direction est chargée au premier chef des principaux états et indicateurs économiques. Ses activités intéressent tout le produit de Statistique Canada et d'autres données; elle fournit des données macro-économiques intégrées aux économistes et à tous ceux qui désirent se renseigner sur les phénomènes économiques.

- **Division de la balance des paiements et des flux financiers**
- **Division des analyses de conjoncture**
- **Division du produit national brut**
- **Division du produit industriel**

Division de la balance des paiements et des flux financiers

Cette division est chargée de la collecte, de l'analyse et de la publication de statistiques et de bulletins intéressant les secteurs suivants de l'économie:

- les estimations de la balance des paiements concernant les opérations de compte de capital et du compte courant entre le Canada et les autres pays;
- la situation du Canada sur le marché des placements internationaux et l'actif et le passif du pays à l'étranger;
- les comptes des flux financiers qui visent à intégrer les activités financières de l'économie canadienne dans une structure statistique unique et à décrire les mouvements de fonds entre les différents secteurs; et
- la publication de statistiques sur les voyages internationaux des Canadiens à l'étranger et des non-résidents au Canada.

Le programme de publication de la division comprend des bulletins trimestriels sur la balance des paiements et les comptes des flux financiers, des bulletins mensuels sur le commerce des valeurs mobilières entre le Canada et d'autres pays ainsi que des bulletins mensuels et annuels sur les voyages entre le Canada et les autres pays. Les séries principales disponibles

sur les placements internationaux et sur la propriété et le contrôle étrangers des industries au Canada ont également été publiées.

Un rapport détaillé sur la balance des paiements du Canada, englobant les années 1965 à 1970, a paru cette année. Des sections spéciales traitent des résultats d'un relevé des paiements internationaux et des recettes au titre des services commerciaux de même que l'incidence de certaines relations canado-américaines sur la balance des paiements.

Des études menées conjointement par le Canada et les États-Unis ont permis la publication en 1970 d'un rapprochement, en termes généraux, du compte courant bilatéral Canada/États-Unis de la statistique sur la balance des paiements. Auparavant, les comptes bilatéraux préparés séparément présentaient des résultats aussi différents qu'inexplicables.

Pour la première fois, les comptes des flux financiers du troisième trimestre de 1972 ont été effectués à l'aide du système entièrement automatisé de traitement et de rassemblement des données. Une première publication et des chiffres de base ont fait partie du programme régulier de production. On a aussi publié les sources et les méthodes de compilation des statistiques de cinq secteurs de l'économie compris dans les comptes des flux financiers.

Dans le cadre d'un projet pilote mené à

l'aéroport de Dorval et visant à améliorer la statistique sur les voyages internationaux entre le Canada et les autres pays, on a mis à l'épreuve un nouveau questionnaire et des techniques d'enquête refondues. Selon toute vraisemblance, les résultats qui seront publiés en 1973 influenceront sur les programmes à venir dans ce domaine. La section a accentué le travail et les activités de liaison sur le terrain avec l'administration des ports douaniers en vue de favoriser la collaboration dans les projets statistiques conjoints.

Des fonctionnaires supérieurs de la division ont représenté le Canada lors de réunions présidées par l'O.N.U., l'O.C.D.E. et le F.M.I. où l'on s'est entretenu de la statistique sur les voyages internationaux, de la statistique financière et de la statistique sur la balance des paiements. La Section des voyages internationaux a également participé à la Conférence fédérale-provinciale sur le tourisme tenue à Ottawa en octobre 1972.

Division des analyses de conjoncture¹

La Division des analyses de conjoncture vient d'entreprendre un programme de recherche et de développement qui comprendra: des travaux de recherche méthodologique dans le domaine de l'estimation d'agrégats économiques et d'autres agrégats; la construction de modèles et

l'élaboration de techniques d'estimation destinées à réduire les délais de publication de diverses séries de Statistique Canada et à en accroître l'utilité; des travaux de recherche analytique appliquée; des travaux consacrés à l'utilisation de la désaisonnalisation et d'autres méthodes de lissage dans l'analyse des séries chronologiques. La division a également assuré des services consultatifs en ce qui a trait à l'application de techniques économétriques et de techniques assimilées ainsi que dans le cadre de travaux menés par des groupes de recherche appartenant à d'autres organismes.

La division a aussi poursuivi ses travaux d'extension et de gestion du CANSIM et d'un système automatisé de données économiques. Ce système permettra de stocker les données les plus en demande dans la prise de décisions et l'analyse modernes, et comprendra un programme de gestion des dossiers ainsi qu'une programmation associée de calcul et d'édition. Le système vise avant tout à permettre un accès rapide, même en cours d'exploitation, aux données statistiques les plus récentes; il doit en outre permettre aux utilisateurs de consacrer moins de temps à la tenue de livres et à la préparation de rapports, et aux spécialistes de s'attacher davantage à l'analyse et à la recherche; il donnera enfin des instruments d'analyse de la conjoncture économique beaucoup plus raffinés.

La division s'occupe également de la publication de la Revue statistique du Canada et de ses suppléments.

Au cours de l'année, la division a mis la dernière main à quatre études intitulées: *Economic Returns to Education in Canada*, *Les déterminants du taux d'activité des femmes mariées dans la population active du Canada: une analyse économétrique*, *A Composition of a Time Series is an Algebra of Averages* et *Pay Worker Reconciliations: 1972 Study*.

Division du produit national brut²

La Division du produit national brut est chargée de préparer et de publier sur une base trimestrielle, annuelle et chronologique les comptes nationaux des revenus et des dépenses. Cela comprend les agrégats du revenu national, du produit national brut et de la dépense nationale brute (cette dernière étant exprimée en dollars courants et en dollars constants) ainsi que le revenu personnel et ses composantes présentées sur une base nationale et provinciale. La division exerce également des activités de recherche, de développement et d'analyse.

La division a entrepris une vaste révision chronologique des changements statistiques et conceptuels. La première étape, qui visait des changements d'ordre conceptuel ainsi que d'importantes améliorations statistiques, s'est soldée par la publication en 1969 d'estimations annuelles préliminaires du produit national brut et d'estimations nationales brutes (ainsi que de leurs composantes) pour les années 1926 à 1968. On s'est également attaché aux séries chronologiques annuelles détaillées pour ces mêmes années et les résultats ont été diffusés sous la forme d'états mécanographiés en 1970.

Des estimations trimestrielles comparables pour les années 1947 à 1968 ont enfin paru sous forme d'imprimés d'ordinateur en 1970.

La seconde étape visait des révisions statistiques supplémentaires qui n'étaient pas aussi importantes que celles effectuées au cours de la première étape. On a tenu compte des résultats du recensement du commerce et des services de 1966 de même que des données nouvelles et annuelles pour plusieurs éléments. On a introduit des méthodes améliorées dans le cas de plusieurs séries principales aux fins des estimations annuelles et trimestrielles jusqu'en 1947.

En juillet 1972, la division a mis à la disposition des utilisateurs une reproduction de l'imprimé d'ordinateur présentant la révision chronologique des comptes nationaux trimestriels des revenus et des dépenses pour la période 1947-1971. En septembre, on a préparé un bulletin qui renfermait une partie de la révision chronologique des comptes nationaux annuels des revenus et des dépenses. Ce bulletin ne présentait que la répartition géographique du revenu personnel et de ses principaux éléments pour les années 1926 à 1971. En novembre, l'ensemble des comptes nationaux annuels des revenus et des dépenses a paru. Cet ensemble comprenait des tableaux récapitulatifs, des tableaux sectoriels, des tableaux de répartition par activité économique et du produit domestique brut, des tableaux de répartition du revenu personnel, des tableaux supplémentaires sur les administrations publiques et divers autres tableaux, dont des états de rapprochement.

On a commencé à préparer un exposé complet des concepts, des sources et des méthodes intéressant les comptes des revenus et des dépenses; ce travail se terminera en 1973.

Nous procédons actuellement à la planification de trois publications officielles de révision chronologique:

1. La série annuelle chronologique, 1926 à 1968 (à tout le moins);
2. La série trimestrielle de 1947 à 1968;
3. Une publication portant sur les concepts, les sources et les méthodes sortira de presse en 1974.

Maintenant que la révision chronologique est terminée, on s'attend à ce que la division reprenne la publication des estimations annuelles détaillées courantes au cours de l'été 1973 en y incorporant les révisions. Cela signifie par exemple que l'on pourra se procurer les estimations provisoires pour 1972 et les estimations révisées pour 1971 du revenu personnel par province.

Division du produit industriel³

La Division du produit industriel publie les indices mensuels, trimestriels et annuels du produit intérieur réel pour l'ensemble de l'économie, de ses principaux éléments, tels que l'indice de la production industrielle et pour un grand nombre de branches d'activité. Plus de 120 indices de production paraissent chaque mois dont des agrégats relatifs aux industries manufacturières, au commerce de détail et au

transport. Les chiffres annuels sont plus détaillés.

Les révisions de 1968 à 1971 ont été publiées dans le supplément annuel de septembre 1972 de la publication mensuelle intitulée *"Indices du produit intérieur réel par industrie"*. À la fin de l'année financière, une révision plus complète était presque terminée; on prévoit qu'elle sera publiée dans le supplément annuel de 1973, et elle comprendra toutes les révisions effectuées depuis 1961.

La division publie également chaque année la valeur ajoutée en dollars courants pour les industries de biens de chaque province. Le *"Relevé de la production — 1970"*, publié en 1973, contient les données les plus récentes ainsi que des tableaux chronologiques pour la période 1926 à 1970.

1 Division née de la fusion du service de recherches en économétrie et du Service des séries chronologiques générales.

2 Auparavant la Division du revenu national et de la dépense nationale.

3 Auparavant la Division de la production et de la productivité nationale.

Direction de la statistique économique

La direction produit des statistiques sur les principaux secteurs d'activité économique. Les renseignements sont recueillis auprès des établissements des sociétés par voie d'enquête et à l'aide de dossiers administratifs. De façon générale, le produit statistique de cette direction porte sur la production ou la vente de biens ou de services, les matières utilisées, l'emploi, les prix, les importations et les exportations.

- Division du commerce extérieur
- Division du travail
- Division de l'enquête sur la population active
- Division des industries manufacturières et primaires
- Division du commerce et des services
- Division des prix
- Division des transports et des communications
- Division des entrées-sorties

Division du commerce extérieur

La division s'occupe de compiler, d'analyser et de diffuser la statistique des marchandises que le Canada exporte ou importe. La partie permanente de ce programme concerne la production de bulletins réguliers et de totalisations spéciales qui présentent des données sur le commerce selon la denrée, le pays, la province, le dédouanement des marchandises exportées ou importées, le mode de transport, la région d'embarquement des exportations et le numéro tarifaire des importations.

La formule concernant les importations passant dans les bureaux de douane canadiens a été remaniée et développée par suite d'une entente entre Statistique Canada et le ministère du Revenu national en vue d'automatiser les procédés douaniers. Une modification importante a été le transfert de responsabilité de Statistique Canada à l'importateur qui doit maintenant fournir le code numérique de la marchandise sur la nouvelle formule d'importation.

La nouvelle Classification canadienne développée pour le commerce international, qui comprend quelques 16,000 postes, facilitera le contrôle douanier des importations et simplifiera les méthodes administratives par un système automatisé. Le système sera introduit par étapes: d'abord, un projet-pilote à Montréal,

puis à Toronto, six mois plus tard, et, enfin, une mise en place complète vers la fin de 1975.

Un programme de voyages sur les lieux, effectués par des agents de produits en collaboration avec le ministère du Revenu national (Douane), se poursuit afin d'expliquer la classification des marchandises aux courtiers et aux importateurs. De plus, on a préparé 20 suppléments à la CCCI selon des divisions d'activités économiques en vue d'aider les importateurs et les courtiers qui importent certaines marchandises. Trente autres de ces suppléments sont en préparation.

On a procédé au rapprochement de la statistique commerciale pour 1970 du Canada et des États-Unis en présentant et en effectuant par ordinateur l'analyse détaillée des deux ensembles de données par rapport à la Classification type pour le commerce international (C.T.C.I.) et en étudiant certains documents des États-Unis appariés avec des documents correspondants du Canada. On projette actuellement de faire la concordance entre les données de 1971 et celles de 1972.

L'étude de 1970 révèle que les deux pays ont surestimé la valeur de leurs importations par rapport à leurs exportations en utilisant les valeurs qu'avait fixées l'administration douanière plutôt que les valeurs que les sociétés déclarantes avaient indiquées lors des transac-

tions. Les deux pays ont également sous-estimé le rôle des exportations par suite de déclarations incomplètes. Parmi les autres causes de divergence, mentionnons la prise en compte irrégulière des frais de transport et des importations de nature temporaire, de même que les invraisemblances dans les définitions utilisées aux fins des opérations commerciales.

En résumé, le chiffre accepté au titre de l'excédent du commerce des marchandises pour le Canada s'est élevé à 1,4 milliard de dollars comparativement à un milliard qu'avait indiqué le Canada et 2 milliards, selon les États-Unis. Un bulletin détaillé portant sur l'étude de 1970 a été publié en avril 1973.

On a établi en collaboration avec la Division de la balance des paiements un questionnaire-enquête spécial visant à obtenir les données de 1971 sur la méthode de relevé des prix et de déclaration des exportateurs canadiens. Nous savions avant cette enquête que certaines marchandises canadiennes comme les céréales, le charbon et le papier-journal n'étaient pas indiquées au bureau d'entrée, franco bord au point de production. L'enquête nous a confirmé que les deux tiers de la valeur des exportations ont été déclarés franco bord au port de sortie et un sixième au prix de livraison. Au nombre des importations, 86 % ont été indiquées comme étant franco bord à l'usine étrangère, 7 % au

port étranger de consignation et 7 % au prix de revient net au Canada. Ces constatations contribueront à améliorer les estimations des recettes et paiements de livraisons de la balance canadienne des paiements internationaux.

Les agents de la Division du commerce extérieur ont participé à des études du Conseil de la collaboration entre bureaux douaniers portant sur l'établissement d'un système de codage et de description normalisé des marchandises aux fins du commerce international et à un groupe de travail dont le but était d'établir une corrélation entre la Classification type pour le commerce international (CTCI) et la Nomenclature de Bruxelles (NDB).

Division du travail

Cette division s'occupe d'un vaste programme de statistiques concernant les services administratifs et les établissements et plus particulièrement de statistiques sur l'emploi, le revenu du travail, les coûts de main-d'œuvre à la charge de l'employeur, la profession des salariés et les postes vacants, les régimes de pensions ainsi que des données concernant la Commission d'assurance-chômage et le ministère de la Main-d'œuvre et de l'Immigration.

La Section des pensions a publié la première d'une série de brochures intitulées "Régimes de pensions du Canada"; les renseignements sont tirés d'une banque de données qui a été mise sur pied grâce à la collaboration de la Division fédérale de l'assurance et des autorités compétentes des provinces de Québec, de l'Ontario, de la Saskatchewan et de l'Alberta. Il a été nécessaire de réimprimer deux fois la brochure en deux mois pour répondre à la demande.

Afin d'aider le ministère du Revenu national-impôt, on a reconçu le questionnaire de l'enquête sur les régimes de pensions en fiducie de sorte que les employeurs puissent l'utiliser comme pièce à l'appui aux fins de leur déclaration d'impôt sur le revenu. Ainsi, ils ne seront pas tenus de remplir une déclaration spéciale.

En plus de produire des données mensuelles sur l'emploi, les gains et les heures-hommes, la Section de l'emploi mène des enquêtes annuelles détaillées sur les coûts de main-d'œuvre. Ces dernières ont fourni des statistiques sur la composition des coûts salariaux et le coût des "avantages sociaux". Au cours de l'année, on a publié un bulletin intitulé "Coûts de main-d'œuvre au Canada: finances, assurances et affaires immobilières". En outre, on a donné les premiers résultats de l'enquête sur les transports, les communications et autres services d'utilité publique. Dans le cadre d'un programme destiné à montrer certains aspects de l'emploi dans des branches d'activité particulières, une nouvelle publication intitulée "Gains et heures de travail au Canada - Commerce de détail" a paru en septembre. Elle fournit pour la première fois des renseignements distincts sur les gains et les heures de travail des hommes et des femmes travaillant dans le commerce de détail.

Au début de 1972, on a fait une enquête sur

les coûts de main-d'œuvre dans les secteurs de la fabrication et de l'exploitation forestière; les résultats paraîtront l'année prochaine. On a aussi mené, en 1972, une enquête sur l'emploi, les heures de travail et les gains dans l'industrie touristique. Les données de l'enquête, qui a été planifiée et effectuée en collaboration avec les ministères fédéraux et provinciaux, ont paru en mars 1973; une publication générale de ces données est prévue pour le mois d'août 1973.

En 1972, les résultats des enquêtes trimestrielles sur les postes vacants ont été publiés. On prévoit que la mise au point de données lisibles par machine en vue d'accélérer la production de la publication, de faciliter la préparation des totalisations et de répondre aux demandes spéciales sera terminée vers le milieu de 1973.

On établit actuellement des totalisations portant sur les taux minimums de salaire à l'embauche; une partie du travail sera achevée à l'été de 1973. Cette nouvelle dimension aux données sur les postes vacants rehaussera la valeur des renseignements utilisés pour des fins analytiques.

À la suite de la mise en place, en 1972, d'un système automatisé de versement des prestations par la Commission d'assurance-chômage, la Section de l'assurance-chômage et de la main-d'œuvre a terminé l'élaboration des plans en vue de traiter les documents relatifs aux demandes de prestations. Ces plans permettront une utilisation plus efficace des ressources en personnel de bureau et fourniront peut-être des renseignements détaillés et actuels sur les prestataires, leur admissibilité au régime et les prestations versées à leur endroit. On a aussi terminé la planification de la collecte par voie de sondage de données sur la profession des salariés pour 1973. L'échantillon se compose de 15,000 unités déclarantes choisies parmi des entreprises importantes et quelque 54,000 autres de moindre importance. Toutes les données seront recueillies par interviews téléphoniques ou par des visites afin de garder le taux de non-réponses à son minimum. À cette fin, on assurera l'employeur qu'il ne passera pas plus d'une interview par année. Les employeurs seront priés de signaler tous les salariés par profession, pour un mois donné, en utilisant les titres des postes appropriés. Dans le cas des employeurs qui comptent un grand nombre de salariés et de titres de postes, on fera un sous-échantillonnage au sein de l'unité déclarante. On a visité nombre d'entreprises importantes afin d'établir une liste complète des salariés par titre de profession; cette liste servira aux enquêteurs lorsqu'ils communiqueront avec les entreprises.

Grâce à l'appui financier du ministère du Travail du Canada, la division poursuit actuellement la mise sur pied d'un programme national de statistiques sur les accidents du travail. On veut ainsi utiliser les données recueillies des Commissions des accidents du travail plutôt que les comptes rendus de ces accidents. Après consultation avec le U.S. Bureau of Labour Statistics, et de concert avec les commissions

provinciales des accidents du travail et des organisations pour la prévention des accidents, on a mis au point une méthode uniforme de présentation proposée en vue de la totalisation des données sur les accidents du travail qui occasionnent une perte de temps. Cette méthode, et le système de classification qui lui est sous-jacent, font actuellement l'objet d'une étude avec les commissions des provinces.

Les statisticiens des commissions des accidents du travail de la Colombie-Britannique, de la Nouvelle-Écosse et de l'Alberta et des représentants de certains groupes de prévention des accidents se sont réunis à Statistique Canada le printemps dernier pour étudier la présentation proposée et discuter de problèmes communs.

Au cours de l'année, le Service de la recherche et du développement en main-d'œuvre a collaboré à des travaux d'élaboration pour le compte du service de l'enquête sur la profession des salariés. Les cadres spécialisés ont aussi préparé de la documentation et participé à des comités interministériels chargés de l'élaboration de travaux dans d'autres secteurs tels que l'enquête postcensitaire sur la main-d'œuvre hautement qualifiée que la Division du recensement prévoit mener.

On a entrepris une série d'analyses trimestrielles de l'évolution du marché du travail dans le cadre d'un nouveau programme d'analyses de conjoncture. Le deuxième numéro du bulletin intitulé *Études des statistiques du travail* a été publié; il porte sur le chômage et les femmes dans la population active.

Division de l'enquête sur la population active¹

La Division de l'enquête sur la population active a pour fonction de recueillir des données sur la population active, et de chercher à en accroître la qualité; ces données nous viennent d'une enquête mensuelle qui poursuit deux objectifs:

1. Classer la population du Canada suivant son activité au cours d'une semaine donnée chaque mois, de façon à déterminer la situation de l'emploi et du chômage à cette date. (L'enquête nous permet en outre de recueillir nombre de renseignements descriptifs sur les caractéristiques des personnes observées.

2. Recueillir d'autres renseignements du plus haut intérêt sur des questions aussi diverses que le cumul d'emplois, l'expérience de l'emploi chez les étudiants pendant l'été, les travailleurs saisonniers et à temps partiel, la citoyenneté, l'immigration, l'usage du tabac, etc.

L'échantillon a été conçu de façon à représenter l'ensemble des personnes de 14 ans et plus habitant au Canada (exception faite des résidents du Yukon et des Territoires du Nord-Ouest, des Indiens dans les réserves, des pensionnaires d'institutions et des membres des Forces armées). L'enquête est menée par plus de 800 enquêteurs qui visitent les 32,000 ménages de l'échantillon tous les mois.

Les premiers résultats de l'enquête sur l'emploi et le chômage sont publiés sous forme de communiqué. Les chiffres complets paraissent ensuite dans la publication intitulée **La population active**. Ce bulletin donne également les résultats des questions supplémentaires qui constituent de précieux outils d'analyse de l'état du marché du travail. La création d'une sous-section chargée de coordonner la production et la publication des résultats de ces enquêtes supplémentaires est l'un des principaux facteurs qui ont contribué en partie à réduire les délais de publication; c'est ainsi que les résultats de six des douze enquêtes menées au cours de l'année (sur le niveau d'instruction, le cumul d'emplois, l'expérience de l'emploi chez les étudiants pendant l'été, par exemple) ont pu être publiés l'année même.

D'autres résultats de l'enquête ont été publiés; certains ont fait l'objet d'articles comme par exemple une étude des chômeurs selon l'activité économique et la profession et de la famille de ces derniers.

La division fait également paraître tous les ans un bulletin intitulé **Main-d'oeuvre, statistiques désaisonnalisées**, où sont consignés des chiffres concernant la période janvier 1953 à décembre de l'année visée; on y trouve, entre autres, des séries sur les principales caractéristiques de la population active (en chiffres réels et désaisonnalisés), et une liste des facteurs de désaisonnalisation. La division prépare actuellement un supplément à cette publication qui renfermera des données sur d'autres séries de la population active fréquemment demandées.

La division vient également de se lancer dans un grand projet qui doit s'étendre sur trois ans et entraîner des déboursés de 8 millions de dollars, soit le Projet d'évaluation et de révision de l'enquête sur la population active. Afin de pouvoir répondre à la demande croissante de données en ce domaine, nous comptons en effet étendre le champ de l'enquête et multiplier le nombre d'observations que nous faisons pour l'ensemble de la population active du Canada. Nous nous proposons avant tout de recueillir:

1. des données qui nous permettront de dépasser le stade de la simple distinction entre les personnes occupées, les chômeurs et les inactifs, et d'obtenir une image beaucoup plus nuancée du marché du travail;
2. des données qui nous permettront de suivre de plus près les transformations de la population active (les mouvements bruts entre catégories d'un mois à l'autre, par exemple); et
3. des données fondées sur des échantillons plus importants qui nous permettront d'obtenir des détails au niveau régional, provincial et infra-provincial, et d'établir ainsi des recoupements d'une finesse inégalée.

L'enquête sur la population active a été lancée en 1945 et menée sur une base mensuelle depuis 1952. Ainsi, le moment venu de reprendre les principaux éléments de l'enquête actuelle pour construire la nouvelle, il faudra éviter avec soin de créer une solution de continuité. En résumé, le projet de révision vise à mettre sur pied un nouvel outil d'enquête qui puisse

répondre aux besoins actuels en données tout en maintenant un lien entre les deux enquêtes.

Au cours des travaux préliminaires de planification, nous avons fait, en 1970, une évaluation des opérations sur le terrain, et, en 1971, une étude approfondie des concepts. Ce n'est qu'en 1972 que nous avons attaqué le gros du travail, en nous attachant tout particulièrement à la planification plus détaillée des autres tests sur le terrain et des projets de recherche qui seront menés au cours des deux années à venir. La nouvelle enquête devrait être lancée en 1976.

Un document décrivant le projet d'évaluation et de révision de l'enquête sur la population active est disponible sur simple demande.

Division des industries manufacturières et primaires

La division est chargée de rassembler des données statistiques sur la fabrication, l'extraction minière, l'exploitation forestière, la pêche et l'énergie. Les données d'enquêtes et de recensements sont publiées sous forme de premiers résultats, de publications régulières et de totalisations spéciales. Pendant l'année, la division a surtout cherché à améliorer le contenu et la qualité des données, à réduire les délais de publication, à diminuer le fardeau des enquêtes, à mettre au point et à appliquer de nouvelles techniques, à automatiser les enquêtes et à former le personnel.

Des séries statistiques nouvelles ou plus facilement accessibles ont été publiées; celle intitulée "**Disponibilité et écoulement d'énergie au Canada 1958-1969**" a été si bien accueillie qu'elle deviendra une publication annuelle. Le contenu des bulletins de service a été augmenté de façon à englober diverses totalisations spéciales et des publications qui ne figuraient pas précédemment au catalogue. Une nouvelle enquête trimestrielle a été instituée afin de fournir des données sur les livraisons de fournitures de bureau.

L'expansion des enquêtes existantes visant à produire des données plus utiles s'est traduite par l'amélioration des données statistiques sur le stock et la production de tabac, le pain, les confiseries, les chaussures, les vêtements pour hommes et pour femmes et les ventes de produits antiparasitaires.

On a continué de déployer des efforts en vue de réduire le fardeau des enquêtes dans les enquêtes de Statistique Canada et celles d'autres organismes où les données sont identiques ou semblables à celles que possède déjà Statistique Canada. Dans le premier cas, les déclarations d'impôt remplacent encore, dans les travaux d'élaboration, les enquêtes sur les petites entreprises, en particulier dans le recensement des industries manufacturières. Du même coup, ces enquêtes ont eu le choix de présenter un état financier à l'appui des résultats du recensement de 1972 des industries manufacturières au lieu de fournir certaines données financières.

Les résultats de la compilation du questionnaire d'essai révisé du recensement des industries manufacturières pour 1971, établi en collaboration avec l'Institut canadien des

comptables agréés, font toujours l'objet d'une évaluation, et certaines mises au point supplémentaires s'imposeront avant sa mise en application.

En général, les dispositions relatives à la collecte conjointe des données qui figurent dans la Loi révisée sur la statistique permettent d'éviter plus facilement le chevauchement des enquêtes menées par des organismes gouvernementaux. Ainsi, Environnement Canada et Statistique Canada ont conclu un accord au sujet d'une enquête conjointe sur l'utilisation des eaux par les grandes industries. Un travail considérable a également été fait avec les organismes statistiques provinciaux dans l'établissement de règles relatives aux formalités de collecte conjointe des données en ce qui a trait aux divers recensements industriels.

En janvier 1973, un plan général d'enquête révisé et consolidé a été mis en oeuvre pour l'enquête mensuelle sur les livraisons, les commandes et les inventaires afin de satisfaire à la demande de chiffres plus précis et d'assurer une plus grande fiabilité des estimations mensuelles sur les livraisons, selon les principaux groupes d'industries au niveau provincial. Grâce à l'automatisation de l'enquête sur le pétrole raffiné, les données mensuelles ont pu être publiées deux semaines à l'avance, et les données annuelles, huit mois à l'avance.

Même si l'automatisation du recensement des industries manufacturières ne s'est pas produite aussi rapidement que prévue, des progrès encourageants ont été observés dans plusieurs modules. Le dossier principal des envois postaux, des vérifications et des suivis fonctionne depuis trois ans; de fait son utilisation a été beaucoup plus étendue que celle projetée initialement. Le module de composition photographique à l'aide d'ordinateur devrait produire ses premiers résultats à l'été de 1973. L'essor du module de contrôle et d'imputation des statistiques principales a été ralenti en raison de l'incertitude quant à la présentation et au contenu du questionnaire révisé du recensement des industries manufacturières; des progrès encourageants ont cependant été réalisés dans le domaine du traitement automatique des statistiques sur les produits.

Quant aux autres travaux effectués, mentionnons la rédaction de la "**Classification des produits industriels**"; le "**Volume I — La classification**" paraîtra au printemps de 1973. Des articles pertinents seront insérés dans tous les questionnaires utilisés pour le recensement des industries manufacturières pour 1973; cette classification sert de base à des tableaux sur la disparition, à l'échelle nationale, des produits fabriqués les plus importants en intégrant les données sur les livraisons, les exportations et les importations. La première étude menée au Canada sur la diversité industrielle dans les entreprises de fabrication à caractère multi-industriel a été publiée dans la "**Revue statistique du Canada**". À la fin de l'année, un document provisoire sur la concentration des industries de fabrication, des mines et d'exploitation forestière était sur le point d'être publié. Le travail d'élaboration s'est également pour-

suivi relativement aux statistiques des petites régions, l'objectif principal étant de fournir, en particulier par la mise en application des techniques de géocodage, des données sur des groupements de régions géographiques hors norme. Au cours de l'année, on a mis l'accent sur la formation en cours d'emploi, les séminaires, les films, les voyages sur le terrain et les cours théoriques de formation. Ces derniers cours interviennent pour environ 400 jours-hommes et les cours de formation linguistique, en particulier de français, pour 750 jours-hommes. La division a également pris une part active dans nombre de comités, et a entretenu des liaisons avec les secteurs public et privé, tant au Canada qu'à l'étranger.

Division du commerce et des services

Cette division a pour fonctions de recueillir, de dépouiller et de publier des données sur les secteurs du commerce de détail et de gros et sur les services, et d'entreprendre des projets spéciaux reliés à la distribution des biens et à la prestation de services aux consommateurs des sources primaires et secondaires. Elle entreprend aussi des recherches spécialisées et vient en aide aux utilisateurs en leur fournissant des totalisations spéciales et des conseils sur les données publiées. Afin de mieux répondre à ces objectifs, deux directeurs adjoints ont été ajoutés à la division qui a été réorganisée selon les sections suivantes: Section du commerce de détail, Section du commerce de gros, Section des services commerciaux, Section des services non commerciaux, Section du crédit à la consommation et des travaux spéciaux, Section des produits et des résultats d'exploitation, Section du recensement, dont les fonctions principales portent sur la planification et la coordination, Section de la recherche et du développement, Section de l'utilisation des données fiscales et Section du service central.

La collecte des questionnaires sur le recensement du commerce et des services de 1971 était presque terminée au 31 mars 1973. En 1973-1974, la dernière étape du recensement, l'imputation par vérification machine, la totalisation des données, la publication des bulletins, sera en bonne voie. Le recensement de 1971, plus que tout autre recensement, promet de fournir des renseignements de haute qualité; grâce à une base de micro-données informatiques, on sera maintenant en mesure de satisfaire à presque toutes les demandes de données spécialisées (à moins, bien sûr, que ces demandes ne mettent en cause le caractère confidentiel des données). Les données qui seront publiées, surtout au niveau provincial ou au niveau des petites régions, porteront sur les ventes, l'emploi, la marge bénéficiaire brute, les frais d'exploitation, les revenus non commerciaux, les ventes par classe de clients, la forme d'organisation, l'importance de la propriété et les ventes par catégorie de produits.

Au cours de l'année 1972-1973, la Section du commerce de détail a poursuivi l'élaboration de la nouvelle enquête-échantillon sur le commerce de détail, afin de mesurer les ventes des détaillants canadiens. Par suite du transfert des

responsabilités administratives de la Commission d'assurance-chômage au ministère du Revenu national en ce qui concerne les mises à jour de la liste d'adresses, il a fallu procéder à des révisions et à des modifications importantes du programme; comme ce programme est à l'essai actuellement, la publication des résultats de la nouvelle enquête devrait débiter vers la fin de 1973. À cause du retard, on a dû envisager de poursuivre l'ancienne enquête-échantillon jusqu'à la fin de 1973.

Un nouveau bulletin mensuel intitulé **Stocks commerciaux** a été publié afin de fournir des renseignements sur les stocks des magasins à succursales multiples, des grands magasins, des commerçants de détail indépendants et des commerçants de gros. (La Section du crédit à la consommation et des travaux spéciaux de la division a pris en charge ce rapport.) En outre, on a élargi le champ d'observation de l'enquête annuelle sur les centres commerciaux afin d'y inclure les mails commerciaux intérieurs. Les données de plusieurs régions métropolitaines et des principales régions urbaines de 1972 feront l'objet d'études, afin de déterminer l'influence des services commerciaux sur le commerce de détail. Les publications parues au cours de l'année comprennent le bulletin **Magasins de détail à succursales, 1970 et Centres commerciaux au Canada, 1970**. Le calendrier de l'enquête annuelle a été rétabli en 1973, à la suite d'une révision complète des questionnaires.

1. La mise à jour de son programme de publication;
2. Le contrôle et la totalisation des données provenant de la première enquête;
3. La planification pour l'enquête de 1972 de l'industrie des services informatiques;
4. L'automatisation de l'enquête sur l'hébergement des voyageurs (autrefois enquête sur les hôtels); et

La Section du commerce de gros a entrepris une série de révisions chronologiques des données sur les marchands de gros, publiées entre 1961 et 1971; ces données rectifiées ont été publiées au mois de juillet. Dans le cadre du programme du recensement de 1971, cette section a préparé des notes détaillées de contrôle et des instructions sur les totalisations concernant les entreprises de gros (marchands de gros, agents et courtiers, vendeurs de produits primaires, vendeurs de mazout en vrac) qui, lors du recensement, faisaient l'objet d'une enquête.

Les données mensuelles sur les stocks des marchands de gros ont été incluses pour la première fois dans le bulletin intitulé **Commerce de gros**. Une nouvelle enquête sur la vente des moteurs diesel ou à gaz naturel en 1972 a été mise en oeuvre et les questionnaires ont été postés au mois de mars 1973.

De concert avec les associations commerciales, cette section a aussi étudié les données de Statistique Canada, afin de déterminer l'utilité des statistiques produites et établir quels genres de renseignements étaient nécessaires.

Au cours de l'année 1972-1973, la Section des services commerciaux s'est profondément engagée dans:

5. Les activités reliées au recensement de 1971.

La publication sur l'**hébergement des voyageurs**, qui a fait suite à l'établissement de nouvelles présentations de tableaux, devrait paraître en mai 1973, et le calendrier des publications pour l'enquête sur l'hébergement des voyageurs de 1972 est en voie d'achèvement. Des efforts ont été consacrés à l'automatisation de l'enquête par l'élaboration de procédés de contrôle automatiques des réceptions et des envois postaux qui doivent être mis en place au cours du premier trimestre de 1973. Les étapes de vérification, d'imputation et de totalisation seront terminées en 1973-1974.

La Section des services non commerciaux prend en compte les diverses organisations culturelles, les syndicats ouvriers et les associations professionnelles, les clubs sociaux, les amicales, les organisations politiques, les services de divertissements et de loisirs à buts non lucratifs et toutes les autres activités non commerciales. Depuis sa création en septembre dernier, la section s'est occupée d'études visant à formuler les concepts et les définitions d'enquête et à mettre sur pied les programmes d'enquête.

La première enquête à caractère non commercial qui débutera au cours du deuxième trimestre de 1973 se fonde sur l'extraction des données provenant des fichiers du ministère du Revenu national où l'on fera le relevé des unités dont le numéro indique qu'il s'agit d'organismes à but charitable. Un rapport statistique en 1973-1974 fournira des renseignements sur ces unités, sauf lorsque la Loi sur la statistique l'interdit. Quand aux autres domaines des services non commerciaux, ils feront l'objet d'une enquête postale. On prévoit que tous les programmes seront appliqués et que plusieurs séries seront publiées en 1975.

Le rôle principal de la Section du crédit à la consommation et des travaux spéciaux a été de publier des données sur le crédit à la consommation et sur le financement des ventes. Elle a également mené une importante enquête sur la vente directe de biens aux ménages, ailleurs que dans les établissements ordinaires de vente au détail. Cette enquête a pris en compte les livraisons de journaux à domicile, de produits laitiers et de produits de boulangerie, les commandes de livres par la poste, de magazines, de disques, la vente de cosmétiques de porte en porte, d'ustensiles de cuisine, de brosses, de balais, de produits d'entretien ménager, et les ventes aux consommateurs sur les lieux de fabrication. Au cours de l'année 1972, on a obtenu des données au moyen d'une enquête visant plus de 16,000 industries manufacturières et entreprises spécialisées dans la vente directe. Les résultats ont paru dans le bulletin intitulé **La vente directe au Canada, 1971**.

La première et la plus importante fonction de la nouvelle Section des produits et des résultats d'exploitation sera l'enquête de 1973 sur les produits de détails dont l'organisation a commencé en 1972. Des études sur la teneur et la conception du questionnaire ont été entreprises au sein de la section et avec les représentants des gouvernements fédéral et provinciaux.

Des rencontres auront lieu avec les associations de vente au détail et les autres entreprises en cause.

L'enquête de 1973 sur les produits de détail se fondera sur un échantillon de 45,000 détaillants choisis à partir de la liste d'adresses postales du recensement de 1971 et mise à jour au moyen de la bande d'adresses de l'enquête sur le commerce de détail. Un questionnaire "à formules multiples" est présentement à l'étude, afin de réduire le fardeau de réponse aux entreprises de détail hautement spécialisées. La mise à la poste de ces questionnaires est prévue pour 1974.

La Section de la recherche et du développement a exécuté deux études de recherches importantes: une analyse et une révision des données du commerce de détail pour la période allant de 1951 à 1961 et une révision détaillée du bulletin du Bureau de statistiques des Nations Unies, *Statistics of the Distributive and Service Trades*.

En outre, la section a analysé et révisé certaines séries internes portant sur des sujets "délicats", dont les magasins à succursales multiples, les magasins indépendants et les grands magasins, la vente des véhicules à moteur neufs, le crédit à la consommation, le commerce de gros et le recensement du commerce.

La section a fourni, entre autres activités, des services de recherche pour d'autres groupes, comme le groupe chargé de la planification de l'enquête de 1973 sur le commerce de détail et a pris en charge les travaux préliminaires d'une révision proposée du *Manuel statistique pour études de marché*, dont la dernière édition remonte à 1969.

Division des prix

Cette division recueille, compile et publie des données sur les prix et les habitudes de dépenses des consommateurs. Son champ d'étude vise principalement trois domaines: les prix de détail et le coût de la vie, les prix industriels et la recherche. Le premier groupe comprend la mesure du mouvement des prix de détail et des écarts de prix en ce qu'ils se rapportent aux modifications et variations du coût de la vie et des revenus réels des groupes de population du Canada et entre le Canada et d'autres pays. On fait aussi des enquêtes sur le budget familial et des études qui nous fournissent des statistiques sur les dépenses des familles selon divers types de famille. (Depuis le 1^{er} février 1973, les enquêtes sur les dépenses des familles ont été menées par la Division du revenu et des dépenses des consommateurs de la Direction de la statistique des ménages.) Le secteur des prix industriels s'occupe de la mesure du mouvement des prix au titre de la production et de la distribution des denrées et des services. Le travail porte principalement sur les prix à l'entrée et à la sortie dans chaque industrie. Des groupes de recherche coordonnent la recherche et l'analyse dans le domaine des prix et d'autres domaines, par exemple le changement qualitatif, les techniques analytiques et la méthodologie de l'indice des prix.

La mise à jour de l'indice des prix à la

consommation du Canada et des agglomérations urbaines s'est poursuivie en 1972 et l'on s'attend qu'elle soit achevée vers le milieu de 1973. Il s'agit de réviser les poids des articles, afin de tenir compte des habitudes de dépenses des familles de 1967; cependant, pour ce qui est des aliments, les articles individuels tireront leur importance relative de l'enquête des dépenses alimentaires pour 1969.

On a étendu le programme de collecte des prix de détail dans plusieurs villes des provinces Maritimes, y compris Charlottetown et Summerside, où l'on étudie la possibilité de produire un indice des prix à la consommation pour un centre démographique plus petit. Une des autres études visait la publication des prix de détail d'environ 50 articles alimentaires de supermarchés dans 14 villes du Canada. La publication des résultats est prévue vers le milieu de 1973.

La Section des dépenses des familles a publié le premier de deux volumes sur les dépenses des familles au Canada en 1969. Le volume III est à l'impression. Le quatrième volume renfermera divers documents analytiques, y compris des estimations de variantes et les résultats d'analyses de régression multiple des données sur les dépenses à partir des enquêtes de 1969 et de 1964. On a publié au mois de mai, le volume II sur les dépenses alimentaires des familles au Canada en 1969. On a préparé au début de 1973, sous forme de tableaux inédits, les résultats de l'enquête de 1971 sur le logement et les biens durables des ménages, enquête qui comprenait des questions détaillées sur le crédit. Les résultats paraîtront dans un seul volume au cours de 1973. Le travail concernant l'enquête de 1972 sur le vêtement, où l'on a utilisé la technique du rappel bimensuel, a été terminé au début de 1973. Comme c'était une enquête d'essai et aussi que les dépenses de vêtements sont traitées dans une enquête annuelle de rappel pour le budget complet de 1972, un bulletin distinct ne sera pas publié. Cette enquête de rappel, qui couvrirait tout le budget de 1972, a été menée au cours de février et mars 1973 parmi 4,500 ménages de 8 agglomérations urbaines. Elle comprenait également un échantillon de 715 ménages situés à Whitehorse, au Yukon, et à Yellowknife, dans les Territoires du Nord-Ouest. On prévoit mener une enquête pilote sur les dépenses alimentaires en août 1973, afin de mettre à l'épreuve de nouvelles questions, tout en gardant la même présentation, sur les endroits d'achat. On prévoit également effectuer une enquête mensuelle détaillée sur les aliments en 1974. Cette enquête est à l'étape de la préparation.

La Section des coûts comparatifs de la vie a apporté son aide au personnel du Conseil du Trésor en mesurant les coûts comparatifs des conditions de vie dans des endroits isolés du Canada. Les agents de Statistique Canada ont mené des enquêtes dans le nord de l'Ontario et du Manitoba, dans le nord-est de la Saskatchewan, au Yukon, dans le nord de la Colombie-Britannique, dans l'est de l'Arctique et dans le nord du Québec. Ces enquêtes,

menées principalement en vue de régler les allocations d'isolement des fonctionnaires fédéraux, permettront d'obtenir les écarts du coût de la vie pour environ 150 autres localités.

On a continué d'élaborer une série de comparaisons des budgets familiaux et des prix des loyers interville. L'analyse de l'enquête sur les dépenses pour 1972 concernant les fonctionnaires fédéraux dans des postes isolés a débuté. Pour ce qui est des comparaisons des prix de détail d'une ville à l'autre, on a terminé la première étape de la mise à jour de l'étude de mai 1971 sur la relation qui existe entre certains centres urbains.

La Section des prix internationaux, poursuivant son aide apportée au régime d'allocations versées au personnel du service extérieur du gouvernement canadien, a terminé l'analyse d'enquêtes élaborées sur les prix de détail et du coût de la vie menées dans 30 villes étrangères. Des enquêtes abrégées ont été effectuées dans 18 autres villes. Les résultats des études sur le coût comparatif de la vie ont été révisés et mis à jour à la lumière de certaines situations, par exemple, la dévaluation du dollar américain. Une enquête sur le coût de l'hébergement des militaires en Europe a été effectuée et analysée. Les agents de la section ont visité 16 villes en Europe et en Asie où des employés du gouvernement canadien sont en service.

Pour ce qui est des prix industriels, on a continué de publier les indices des prix de vente des fabricants pour plus de 100 industries et 1,200 produits, dont 500 ont déjà paru.

L'indice général des prix de gros est révisé en vue de le fonder sur les renseignements dérivés du total des entrées et sorties de 1961.

L'indice révisé des prix des entrées dans l'agriculture est maintenant publié tous les trimestres et l'on travaille actuellement à la révision de l'indice des prix des produits agricoles canadiens. L'indice des prix de vente dans l'industrie fait également l'objet d'une révision, afin de le pondérer et de lui donner une nouvelle base (1971).

Dans le groupe des industries de service, la mise au point d'indices des prix des taux de transport des marchandises progresse. On enquête sur les sources de données et l'on étudie la possibilité d'obtenir des données en vue de concevoir des diagrammes de pondération et des échantillons de prix.

On a publié en 1972-1973 un certain nombre de nouveaux indices des prix concernant le secteur du bâtiment et des travaux publics et les dépenses en immobilisations. Ces indices sont les taux de rémunération de base des syndicats pour la majorité des métiers du bâtiment et des travaux publics, les indices de prix des machines et du matériel forestiers à l'est des Rocheuses, les indices des prix d'entrée concernant la construction résidentielle et enfin les indices des prix d'entrée dans la construction non résidentielle (révision de l'élément salarial seulement).

La mise au point du système des indices des prix de vente des entrepreneurs se poursuit et les premiers résultats seront publiés en 1973-1974. Les indices des prix des stations

génératrices de vapeur, ainsi que des usines de transformation de produits chimiques et des produits minéraux, sont également en cours d'élaboration.

Division des transports et des communications

Cette division, appelée auparavant la Division des transports et des services d'utilité publique, est chargée de la collecte de statistiques sur le mouvement des données et des personnes et de l'information au Canada concernant les transporteurs canadiens. Ses cinq sections spécialisées contrôlent un vaste éventail d'enquêtes qui permettent d'obtenir des données portant sur les finances ou l'exploitation et des statistiques sur le trafic et les règlements concernant le transport ferroviaire, routier, maritime et aérien et les télécommunications, en vue de leur publication à Statistique Canada et d'autres usages.

Au cours de l'année, la division a participé à des études entreprises par le Comité interministériel de la statistique des transports qui se compose de représentants du ministère des Transports, de la Commission canadienne des transports, du Centre de développement des transports et enfin de Statistique Canada. Établi afin de réunir une base complète de statistiques sur le transport, le comité a étudié attentivement les utilisations et les besoins en ce domaine en vue de délimiter la base des données et d'indiquer l'ordre de priorité des nouvelles enquêtes et études. Les équipes de travail de la division ont été modifiées et augmentées afin de pouvoir contribuer davantage aux travaux du comité.

On renouvelle les enquêtes sur les entreprises de camionnage, afin de mieux connaître l'activité de chaque industrie. On s'efforce de constituer un univers plus complet et plus précis des transporteurs de voyageurs et de marchandises et l'on étudie la possibilité d'intégrer des modifications de base à la nouvelle enquête sur l'origine et la destination du transport routier des marchandises, afin d'obtenir une stratification plus juste. Les nouvelles présentations de la statistique des accidents présenteront un caractère beaucoup plus homogène et les chiffres sur le parcours en milles correspondront davantage aux données provinciales, ce qui facilitera encore plus le système de déclaration et fournira de meilleurs comparaisons.

Des études sont entreprises pour voir s'il est possible d'étendre le champ d'observation de la statistique sur les livraisons et d'inclure éventuellement la région du Mackenzie. Toutes les formules de déclaration financière font l'objet de révisions en vue d'obtenir une comparaison plus poussée entre les modes de transport et de tenir compte des techniques actuelles et des méthodes comptables.

Le personnel du centre de la statistique de l'aviation de la division a participé cette année à des pourparlers avec d'autres pays, en vue de signer des ententes bilatérales concernant un calendrier international des services aériens.

Division des entrées-sorties

La Division des entrées-sorties est chargée de l'élaboration de tableaux annuels d'entrées-sorties, qui serviront également de repères pour les valeurs annuelles aux fins des comptes de production dans le cadre du Système des comptes nationaux du Canada; elle est également chargée de coordonner la mise au point d'une méthodologie homogène pour ces comptes.

En 1972-73, elle a achevé la construction des tableaux d'entrées-sorties de 1966 et en a fait le rapprochement avec les comptes des revenus et des dépenses. Elle a continué à travailler à la préparation des tableaux annuels pour les années 1962-65. Les estimations et la méthodologie relatives à la dépense personnelle en biens et services de consommation ont été établies conjointement par la Division des entrées-sorties et par celle du produit national brut pour les années 1947-1969, avec estimations provisoires pour les années 1970 et 1971. La Division a terminé une analyse des tableaux d'entrées-sorties pour les provinces de l'Atlantique, qui est prête à imprimer.

1 (Section de l'enquête sur la population active de la Division du travail.)

Direction de la statistique financière

Cette direction produit un large éventail de données sur les activités des entreprises, de l'industrie et des administrations publiques ainsi que des statistiques sur la construction et l'acquisition de biens immobiliers.

- **Division des finances des entreprises**
- **Division des finances publiques**

Lors de la récente réorganisation de Statistique Canada, les divisions du bureau dont la principale fonction était de recueillir, d'exploiter et de publier les données sur les entreprises ont été regroupées pour devenir le secteur Entreprises de Statistique Canada. Ce secteur a pour tâche de:

1. faciliter l'application uniforme des normes et des concepts et de coordonner la collecte et le contrôle des données sur les activités économiques;
2. assurer que les données recueillies soient pertinentes, exactes, actuelles, cohérentes et compatibles avec celles des autres enquêtes;
3. rendre aussi léger que possible le fardeau de la collecte pour les enquêtés

Le secteur Entreprises comprend deux Directions: la Direction de la statistique industrielle et celle de la statistique générale. La Direction de la statistique industrielle s'occupe du développement et de la coordination de la statistique sur les industries primaires et manufacturières, sur le commerce et les services, l'agriculture, les transports, les communications et la construction. Les statistiques du commerce extérieur, des prix, du travail et des finances ressortissent à la Direction de la statistique générale. La Division des profils et des registres d'entreprises appartient également

à ce secteur et est directement rattachée à son bureau central. Sa principale fonction consiste à élaborer et à tenir à jour, à des fins statistiques, un registre central des entreprises et des établissements concernés.

Division des finances des entreprises¹

Le 1^{er} août, cette division s'est vu confier la responsabilité des enquêtes trimestrielles sur les corporations industrielles et les institutions financières. La division s'occupe maintenant du programme statistique trimestriel de Statistique Canada sur les finances publiques et du programme annuel qui est établi sur les données des dossiers de l'impôt sur le revenu des corporations. La division se charge aussi de la collecte, de l'analyse et de la publication des données recueillies aux termes de la Loi sur les déclarations des corporations et des syndicats ouvriers.

Les renseignements requis des corporations en vertu de cette loi se divisent en deux parties. La section non confidentielle comprend les renseignements sur la constitution en société, les fonctionnaires et les administrateurs, ainsi que sur le contrôle du capital-actions émis par la corporation. La section confidentielle comprend les états financiers et l'échéancier de certains dividendes dus à des non-résidents, l'intérêt et certains services commerciaux.

Les syndicats ouvriers sont tenus de fournir des renseignements de même nature. Pour ce qui est de la section non confidentielle, les renseignements comprennent un exemplaire de la constitution, le nom des dirigeants, le nombre de membres inscrits et d'autres renseignements sur les sections locales, les fiducies et les négociations collectives. La section confidentielle de la déclaration renferme les états financiers du syndicat, ainsi que des renseignements sur les cotisations que reçoivent les syndicats internationaux des membres canadiens.

Un vaste programme de rationalisation de la collecte, du traitement, de l'analyse et de la publication de la statistique financière des corporations a été entrepris en 1972-1973. On s'attendait à ce que ce programme produise des améliorations importantes au niveau de la qualité, des dates de publication et de l'utilité générale de la statistique sur les finances des entreprises. Il devait de plus intégrer plusieurs ensembles de statistiques sur les finances des entreprises et servir de façon plus efficace les besoins statistiques particuliers.

On a procédé à la révision du système d'échantillonnage utilisé dans la compilation de la statistique financière pour l'année statistique 1972. La division tire également profit des données disponibles du ministère du Revenu national qui remplacent certaines données

financières qu'on reportait auparavant de façon globale. L'automatisation de diverses étapes des opérations de la division s'est poursuivie au cours de l'année et la mise en ordinateur des déclarations sur le contrôle entre sociétés commencera bientôt.

Le projet-pilote qui concernait les états financiers de 850 corporations importantes est presque terminé. Il visait à identifier et à solutionner les problèmes concernant l'actualité des données, les différences de méthodes comptables, la classification par activité économique et d'autres questions de nature qualitative.

La division a publié le sixième bulletin annuel de la série (celui-ci pour 1970) intitulée **Statistique financière des corporations**. Établi d'après les états financiers vérifiés que les corporations ont fournis au ministère du Revenu national, ce bulletin renferme des renseignements sur les opérations financières, en particulier le revenu, les dépenses, les bénéfices et la disposition des gains, et sur la position financière qui comprend l'actif, le passif et la part des actionnaires.

L'édition de 1969 renfermait un exposé qui fournissait des renseignements supplémentaires sur l'intégration des sociétés d'extraction minière et des fonderies. La mise à jour en a été effectuée. Une présentation semblable a été incluse pour les industries intégrées du pétrole et du gaz naturel. On donne également des renseignements sur les effets des changements d'années financières, de même que l'effet des fusions et des amalgamations.

Les tableaux indiquant les rapports qui existent entre les finances de 182 industries, dont la première publication remonte à 1969, ont été mis à jour et augmentés de 11 à 15. On a ajouté au bulletin de 1970 un commentaire analytique, ainsi qu'un nouveau tableau sur la relation qui existe entre les groupes d'activités économiques utilisées dans la statistique financière des corporations et dans la classification des activités économiques.

La **Statistique fiscale des sociétés**, édition de 1970, a également été publiée. Elle concerne l'impôt sur le revenu des sociétés, indiquant les industries qui perçoivent un revenu et la province où ce revenu est gagné, et enfin la taille de l'entreprise qui paie les impôts. On y fournit également un rapprochement détaillé des bénéfices comptables de la société et du revenu imposable en montrant l'influence des principales clauses de la Loi de l'impôt sur le revenu servant à déterminer le revenu imposable, de même que l'ampleur des principaux éléments de revenu et les dépenses qui font l'objet d'un calcul différent aux fins de l'impôt sur le revenu et de la comptabilité de la compagnie. Ce tableau présente le revenu imposable des sociétés selon la taille et sert également aux corporations qui déclarent un revenu imposable ou une perte en fait d'impôt sur le revenu. L'édition actuelle renferme pour la première fois une comparaison des données avec l'année précédente, une étude des principaux changements survenus en 1970, ainsi que des renseignements fiscaux détaillés concernant l'intégration des industries du pétrole et du gaz naturel.

La section sur les corporations d'un rapport déposé au Parlement en vertu de la loi contient une analyse détaillée concernant la situation fiscale des corporations sous contrôle étranger et canadien, de même que les mesures améliorées visant les bénéfices des corporations et des renseignements détaillés sur la composition de l'actif de la société.

La Section sur les corporations industrielles publie un bulletin trimestriel intitulé **Statistique financière des sociétés industrielles**, qui renferme des estimations de l'actif, du passif et de la part des actionnaires, ainsi que des gains retenus, des recettes, des dépenses et des bénéfices des sociétés pour 25 groupes importants des industries non financières. En 1972, on a introduit avec la première publication qui devait être publiée en juillet 1973, des questionnaires révisés demandant des renseignements plus détaillés sur les bilans et les états de revenus.

Les mesures de la principale série de la Section des institutions financières, selon le groupe d'activité économique, comprennent le revenu et les dépenses, la situation financière et les flux financiers de la majorité des institutions financières, ainsi que les intermédiaires financiers en activité au Canada. Les questionnaires utilisés pour cette série ont été remaniés et seront introduits au cours de 1973, afin d'améliorer la qualité et de mesurer un certain nombre de nouvelles activités importantes. Les plans visant à refondre les séries trimestrielles sur l'ensemble des corporations de 1971 devaient être terminés d'ici un an.

Ces séries servent aux analystes commerciaux et économiques et aux macro-économistes en vue de développer des programmes monétaires et fiscaux. De plus, les données font partie du système des comptes nationaux et sont utilisées dans divers modèles économétriques, y compris le produit national brut et les comptes des flux financiers.

Le comité institué par l'Association nationale des caisses d'épargne et de crédit reçoit le questionnaire et le contenu de la publication annuelle sur les caisses d'épargne et de crédit. Un questionnaire révisé pourra être publié en 1973. Les publications fournissent de vastes données financières au niveau provincial et d'autres données statistiques et comparatives concernant l'activité des caisses d'épargne et de crédit.

On a aussi poursuivi la série sur les faillites commerciales (banqueroutes), mais on n'a pas réussi à automatiser les opérations tel qu'il avait été souhaité.

La division a étendu son champ d'observation du secteur immobilier en lançant une nouvelle enquête trimestrielle. De concert avec plusieurs autres ministères du gouvernement fédéral, cette division a également pris part à un programme visant à améliorer son champ d'observation de la statistique hypothécaire.

Des recherches sont actuellement entreprises concernant le développement de données financières trimestrielles par province, qui viseraient à fournir des renseignements sur les comptes de dépenses et de revenu à l'échelle provinciale.

Division de la finance publique

La division a terminé l'étude de sa série statistique sur la gestion financière et, afin de répondre aux demandes des utilisateurs, elle a publié un rapport intitulé **Le système canadien des statistiques de la gestion des administrations publiques**, qui explique les concepts, le procédé de classification et la méthodologie utilisée dans la série. À la suite de cette étude, de nombreux changements ont été apportés aux approches et pratiques précédentes. Une révision chronologique des données antérieures sera effectuée en 1974-1975, afin d'établir une série chronologique uniforme à partir de 1960 jusqu'à aujourd'hui.

On a obtenu l'autorisation de publier, selon la gestion financière, les estimations des recettes et des dépenses du gouvernement fédéral pour la nouvelle année. Les données de 1972-1973 seront publiées en 1973-1974, en même temps que les données réelles de 1970-1971 et 1971-1972.

La mise au point d'une série trimestrielle sur la gestion financière des administrations publiques provinciales est terminée et les résultats actuels commenceront à être publiés en 1973-1974, après que les provinces les auront approuvés.

Halifax et Saskatoon ont été le siège d'une enquête pilote visant à définir les relations des entités gouvernementales au niveau local. Des résultats encourageants ont précipité l'annonce d'une proposition voulant que l'enquête soit menée en d'autres régions métropolitaines.

Lors d'une conférence annuelle tenue avec les ministères provinciaux des Affaires municipales et de séances d'information avec des municipalités dans certaines provinces, on a favorisé l'introduction de systèmes types de classification des comptes par les municipalités.

La division a automatisé les procédés de traitement en vue d'une publication trimestrielle et d'une publication annuelle. On prévoit étendre cette automatisation pour rencontrer délais de publication et faire des économies.

La division a beaucoup incité le Conseil du Trésor à mettre sur pied un comité interministériel dont la tâche consiste à améliorer le système actuel d'information sur les finances du gouvernement fédéral et y ajouter de nouvelles dimensions.

La principale contribution au système des comptes nationaux a consisté en un travail préparatoire pour une enquête trimestrielle sur les recettes et dépenses des conseils scolaires qui sera effectuée en 1973.

La division a également préparé des données qui sont utilisées dans le calcul des paiements de péréquation aux provinces. De plus, après que le ministre des Finances eut annoncé le programme tendant à équilibrer le revenu des taxes scolaires perçues sur la propriété, la division a commencé à isoler les sommes en cause.

1 Auparavant la Division de la Loi sur les déclarations des corporations et des syndicats ouvriers.

Direction de la statistique socio-économique

La Direction de la statistique socio-économique s'est occupée de l'établissement, du rassemblement et de l'analyse de vastes systèmes de renseignements socio-économiques et démographiques pour être en mesure de répondre aux demandes de ceux qui ont à préparer les projets et à prendre les décisions. Ces systèmes de renseignements tiennent compte des données du cycle de vie des particuliers et des familles en ce qui concerne la naissance, la nuptialité, la fertilité, l'instruction, la morbidité, l'emploi, la mobilité, le revenu, le logement et même les décès. Les écoles, les universités, etc., fournissent les renseignements sur l'instruction, les données sur le système juridique proviennent des corps policiers et des tribunaux et les données sur la santé et la statistique de l'état civil sont relevées dans les hôpitaux, les registres provinciaux et d'autres sources. Dans ces domaines, les administrations provinciales ne font pas que fournir une aide précieuse; elles demeurent également de grands utilisateurs des données statistiques obtenues de cette façon.

Le recensement du Canada, qui a lieu tous les cinq ans, constitue la plus vaste enquête exécutée par Statistique Canada, plus précisément par la Direction de la statistique socio-économique. L'an dernier, la Division du recensement a publié les résultats du recensement de 1971 et procédé à l'évaluation de ce programme; elle a élaboré des projets en prévision du recensement de 1976 et des recensements d'essai qui le précèdent.

La réorganisation opérée à Statistique

- Division de l'agriculture
- Secteur du recensement
- Division du revenu et des dépenses des consommateurs
- Division de l'éducation, des sciences et de la culture
- Division des opérations régionales
- Division de la santé et du bien-être
- Division de la statistique judiciaire
- Assistance-utilisateurs

Canada en février 1973 visait à établir une organisation qui réponde mieux aux demandes croissantes; à la suite de cette réorganisation, la Direction de la statistique socio-économique a été divisée en deux secteurs distincts: le recensement et les ménages et les institutions. Ce dernier secteur se compose de deux directions, les ménages et institutions et les finances publiques.

La transformation de la Division du recensement en direction* ne fait que souligner l'importance de son programme et l'ampleur de ses activités. Deux services de l'ancienne Direction de la statistique socio-économique, soit la Division des opérations régionales et la liaison avec les provinces, ainsi que les Services consultatifs, ont été relocalisés respectivement au sein du Secteur des services statistiques et du Secteur des services de diffusion et de promotion.

Division de l'agriculture

Cette division s'occupe de la planification, du fonctionnement et de la coordination d'un système statistique en vue de la collecte, de l'évaluation et de la publication de renseignements annuels, mensuels et saisonniers sur l'agriculture. Le programme statistique de la division est appliqué en étroite collaboration avec les ministères provinciaux; les parties ont conclu des ententes en ce sens et mènent des enquêtes conjointes. La division collabore aussi avec des ministères fédéraux, en particulier le ministère de l'Agriculture, et avec des organismes, en vue de planifier des programmes et de recueillir des données administratives qui permettent de mettre au point et de compléter les séries statistiques de base.

On a entrepris, en juillet 1972, une nouvelle enquête annuelle descriptive. Les interviews effectuées auprès d'environ 6,000 agriculteurs ont fourni des renseignements de base sur les superficies en culture, le nombre de bovins, les stocks de céréales, le nombre d'exploitations agricoles et les revenus agricoles et non agricoles. Cette enquête vise à recueillir des données de référence plus fréquentes aux fins du programme d'enquêtes de la division. Le recensement de l'agriculture ne fournit des données de référence qu'une fois tous les cinq ans, ce qui est nettement insuffisant à une époque où le

secteur agricole connaît une rapide évolution.

En raison de la difficulté de prévoir tous les problèmes relatifs à la mise en oeuvre de cette nouvelle enquête, cette dernière a eu tendance, au début, à se situer au niveau de l'élaboration. Les premiers résultats sont encourageants; mais rien encore ne peut être utilisé à des fins officielles. Il faudra peut-être attendre encore quelques années avant que soient obtenus tous les résultats escomptés.

Dans la Section des cultures, la majorité des données sur les principales cultures de céréales et de graines oléagineuses sont recueillies à l'aide de questionnaires envoyés par la poste aux correspondants agricoles. Les enquêtes sur les meuneries et la trituration des oléagineux sont du même ordre que les précédentes. On publie des renseignements sur les conditions de croissance, les superficies devant être ensemencées, l'emploi des engrais, les rendements prévus, les céréales stockées à la ferme, le prix reçu par les agriculteurs et sur la récolte. Ces statistiques serviront à répondre aux demandes de renseignements des agriculteurs, des organismes de commercialisation et des industries connexes. Ces données sont intégrées à d'autres statistiques produites par la Commission canadienne du blé, la Commission des grains, des groupements d'échanges commerciaux et plusieurs ministères. Elles permettent de faire des

études permanentes sur l'offre et la demande des céréales et des graines oléagineuses produites au Canada.

On maintient un programme de déclaration agricole sur le commerce mondial et les cultures de céréales et de graines oléagineuses avec le Service des délégués commerciaux du Canada, afin de fournir une meilleure évaluation de la position internationale du Canada en ce domaine.

En plus du programme régulier, plusieurs techniques nouvelles ont été mises à l'essai en ce qui concerne les cultures. On a surtout essayé d'appliquer le traitement électronique des données (T.E.D.) pour voir si les coûts pouvaient être réduits, l'efficacité augmentée et une analyse plus profonde effectuée.

Un essai divisé en deux parties a été mené avec le lecteur optique des caractères (L.O.C.) concernant les questionnaires agricoles remplis. On s'est servi en premier lieu de questionnaires électrographiques, puis de questionnaires où il fallait inscrire des chiffres au crayon. Les correspondants agricoles ont rempli de façon satisfaisante les questionnaires établis d'après des évaluations visuelles et la lecture électrographique a donné d'assez bons résultats; mais le matériel de lecture optique n'a pas permis d'établir de différence avec les chiffres écrits à la main.

Les techniques qui ont été adoptées pour l'automatisation des publications ont grandement amélioré la préparation pour l'impression du bulletin Grain Milling Statistics et réduit le temps de correction des épreuves.

La préparation des révisions intercensitaires pour les grandes cultures et les cultures spéciales est terminée au niveau provincial.

On a également poursuivi l'opération retour qui est un programme visant à étendre la diffusion du produit statistique de la division. Le travail a été axé sur l'utilisation de présentations à des réunions agricoles; des discussions sur cette méthode ont eu lieu lors des conférences fédérales-provinciales sur la statistique agricole tenues à Québec et à Regina. On a aussi effectué des études préliminaires sur les organes d'information, afin d'obtenir de meilleurs taux de réponse aux questionnaires envoyés par la poste.

En février, une conférence de nature statistique d'une journée a été tenue avec le Conseil des horticulteurs du Canada. Cela nous a permis de présenter une vue générale de l'activité de la division qui ne se restreint pas à la section des cultures.

La préparation des estimations des cultures prévues s'est continuée en Ontario et au Nouveau-Brunswick. Nous avons également collaboré au programme de rendement des pommes entrepris cette année encore par le Bureau de la statistique du Québec. En Ontario, on a étudié l'utilisation des résultats des enquêtes comme base des prévisions officielles précédant les récoltes.

Plusieurs projets entrepris par la section en 1971-1972 et portant sur le bétail et les produits d'origine animale ont été continués en 1972-1973; parmi ces projets, mentionnons une automatisation plus poussée du traitement des données des deux enquêtes semi-annuelles à grande échelle de la section. L'étude qui visait à établir une autre méthode d'estimation de la production totale de lait et qui était menée en collaboration avec la Commission canadienne du lait en Ontario et au Québec, en 1971-1972, a embrassé le Manitoba en 1972-1973. Des communications étroites avec les commissions des marchés ont aidé à simplifier les procédés d'estimation.

Beaucoup de temps a été consacré à la révision des estimations intercensitaires de 1966-1971, afin de les faire concorder avec les points de référence du recensement. Ce grand projet est maintenant presque terminé. La première enquête, en ce qui concerne le bétail et les produits d'origine animale, qui a été complètement automatisée, a été celle portant sur les stocks de viande. Le travail se continue avec d'autres enquêtes sur l'entreposage frigorifique et l'enquête trimestrielle sur les porcs. Les relations entre la section et la Section de la recherche sur les enquêtes et les sondages ont permis de mettre en branle de nouvelles techniques d'échantillonnage pour les enquêtes spéciales sur la volaille et les oeufs, les porcs et l'industrie laitière. Les nouvelles méthodes seront mieux adaptées au procédé croissant de fusion et de spécialisation observé en agricul-

ture. La section a participé au projet 75, qui est une équipe de travail formée de membres du gouvernement, de l'industrie privée et de groupes de producteurs mis sur pied pour enquêter sur le système d'information concernant le boeuf et y apporter des améliorations. Une étude a porté sur la consommation du lait au foyer; des révisions ont aussi été apportées à la série couvrant les années 1966 à 1971. L'an dernier, trois publications sur l'industrie laitière et une sur l'entreposage frigorifique ont paru dans les deux langues. La production et la consommation de viande a été publiée en tonnes métriques et avoirdupois.

Les statisticiens provinciaux se sont accordés unanimement pour ne plus publier la statistique chevaline.

Dans la Section des revenus et des prix agricoles, on a continué en 1972-1973 à calculer et à publier les recettes agricoles en espèces, les dépenses agricoles, les changements de stocks et le revenu net. Une étude a été amorcée sur la possibilité de réduire le volume de statistiques sur le revenu agricole au niveau infraprovincial. On a également commencé à produire des estimations des revenus des familles agricoles et des cultivateurs à partir de sources non agricoles. Les premières estimations ont été présentées à la Conférence canadienne sur les perspectives agricoles. On s'est servi d'un échantillon de déclarations d'impôt sur le revenu de cultivateurs pour produire des estimations des dépenses et des recettes et aussi pour fournir des renseignements sur le revenu net selon la taille économique de la ferme.

La Section des travaux spéciaux et de la recherche s'occupe de la plus grande partie de la planification, de la mise sur pied et de l'application de systèmes informatiques pour la Division de l'agriculture. Son travail comporte la coordination des tâches effectuées par les statisticiens généraux de la Division de l'agriculture et par les spécialistes du Secteur des services statistiques. La section participe également directement à l'établissement des besoins en ce qui concerne le traitement des données et à la spécification du contenu et de la présentation des données d'entrée et de sortie.

Au cours de 1972-1973, la section a continué d'appliquer le système de traitement de l'enquête agricole, afin de saisir, mettre à jour et traiter les données recueillies dans les enquêtes sur les cultures et le bétail effectuées en juin et en décembre. Les modifications au système de traitement de l'enquête agricole ont été rendues nécessaires pour répondre au procédé d'identification du recensement de 1971 et aussi afin d'apparier les fichiers des enquêtes de 1972 avec ceux des enquêtes précédentes. Le système a été remanié en vue d'accorder une plus grande souplesse à la récapitulation dans le domaine géographique.

Le travail s'est poursuivi concernant l'élaboration du Registre central des systèmes agricoles de 1971. On a établi le fichier des noms en consignait le nom, l'adresse et l'emplacement du siège de l'exploitation d'environ 366,000 exploitants agricoles à partir des questionnaires agricoles du recensement de 1971. Les fichiers

principaux du Registre central des fermes rattachaient le fichier des noms et le fichier des données du recensement de l'agriculture, établissant ainsi une liste renfermant le nom, l'adresse et les renseignements du recensement connexes pour chacun des fichiers du recensement. La conception et l'application de l'étape de mise à jour se sont effectuées tandis que l'étape d'extraction a vu le jour au cours de 1972-1973. Ce registre a été utilisé pour adresser les questionnaires de l'enquête de décembre 1972 sur les cultures et le bétail. Au nombre des autres activités connexes menées cette année-là, mentionnons:

1. Un appariement mécanographique-manuel des noms des exploitants agricoles sur la liste postale agricole mise à jour de 1966 et le Registre central des fermes en vue d'apparier les fichiers de l'enquête de décembre 1972 sur les cultures et le bétail avec ceux des enquêtes précédentes;

2. Le codage postal des régions comprises dans le système de codage en août 1972 (le codage postal permet au bureau de poste d'amasser le courrier en paquets et de déterminer le courrier de troisième classe pour les deux taux).

Des demandes spéciales provenant des sections sur les marchandises de la division et de sources extérieures nous sont parvenues concernant la liste des exploitants agricoles du Registre central des fermes de 1971 qui produisaient certaines denrées.

L'analyse de systèmes en vue de l'intégration des enquêtes sur les marchandises a débuté en 1972-1973. On s'attend à ce que le système de traitement des enquêtes agricoles, avec quelques modifications, puisse absorber la majorité des enquêtes visant des produits agricoles.

Secteur du recensement¹

Le Secteur du recensement s'est occupé à fond des étapes de traitement et de diffusion des données du recensement de 1971 et de la préparation détaillée du recensement de 1976.

Les résultats finals du recensement de 1971 ont été rendus disponibles au début de 1972 et comprenaient des répartitions démographiques détaillées devant servir à la révision des limites électorales et aux classifications selon la langue maternelle requises par la Loi sur les langues officielles. Le comité consultatif des districts bilingues a également reçu certaines totalisations spéciales et des cartes d'ordinateurs pour des petites régions. Les résultats du recensement ont également fourni des ventilations démographiques pour de nombreux genres de secteurs géographiques, ainsi que des classifications selon le sexe, le groupe d'âge, l'état matrimonial, la langue maternelle, la taille et la composition des ménages et des familles, des renseignements que contenaient les questionnaires abrégés 2A du recensement.

Le Service de recherches sur les pensions a traité environ 14,500 demandes, la plupart provenant de particuliers qui voulaient une preuve de leur âge à partir des dossiers du recensement. Ce service a également répondu à 16,000 demandes de renseignements contenus

dans les dossiers de l'enregistrement national de 1940.

Au cours de l'année, la Sous-division de l'agriculture a terminé 17 des 18 bulletins de la série préliminaire sur l'agriculture. Le personnel de l'agriculture a organisé dans la plupart des provinces des groupes d'étude auxquels ont assisté des représentants du gouvernement provincial, du négoce agricole, d'établissements scolaires et d'associations agricoles. Le répertoire des données sur l'agriculture, publié en septembre 1972, et la diffusion des données du recensement de l'agriculture ont fait l'objet des discussions.

La Sous-division de la population et du logement a produit un grand nombre de bulletins des séries préliminaires. Aucun cependant n'a été publié sur les caractéristiques économiques par suite des délais qu'a entraînés le traitement des longs questionnaires 2B. Certains bulletins de la série des volumes ont été publiés et, en réponse à des demandes particulières, on a établi des totalisations spéciales.

En plus du programme de publication, la diffusion des données du recensement de 1971 s'est faite par voie de bandes sommaires et de microfilms. Des groupes d'études ont été organisés avec les utilisateurs des données, afin de les informer sur la nature et la disponibilité des renseignements du recensement.

Au cours de l'année, la Section de la diffusion des données a mis sur pied un service-utilisateurs pour les produits et services du recensement. Cette section a préparé divers manuels de travail axés sur l'utilisateur, ainsi que des publications visant à assurer une utilisation efficace des données du recensement. Elle a également joué un rôle important dans les rapports qu'elle a entretenus avec les gouvernements provinciaux qui avaient demandé des données du recensement.

Le personnel de la Section de la recherche et de l'analyse démographique a mené une étude sur la migration, la croissance démographique, les familles et ménages, la nuptialité, la structure âge-sexe et la fertilité. Les résultats font l'objet d'un large éventail de documents, y compris la publication de longs textes, des exposés publiés dans les journaux savants et des bulletins sur des sujets en demande mais non assez approfondis. La section a également aidé à préparer des communiqués sur les projections démographiques et sur l'accroissement démographique nul. Elle a également fourni des services consultatifs au ministère de la Santé nationale et du Bien-être social dans le secteur de la planification familiale et a participé à divers échanges et conférences à l'échelle nationale et internationale.

Au cours de l'année, le travail de projection du Secteur du recensement s'est orienté principalement autour des points suivants a) les projections démographiques provisoires pour le Canada, période 1971-2001, et b) les projections démographiques officielles pour le Canada. Essentiellement, les projections provisoires mettent à jour les projections démographiques de 1969 d'après les données du recensement de 1971 et les étendent jusqu'à l'année

2001. Deux programmes principaux établis sur des projections comprenaient la production de projections particulières pour le Conseil privé et le ministère de la Main-d'œuvre et de l'Immigration. On a préparé des projections supplémentaires pour la Direction du recensement, afin de l'aider à planifier le recensement de 1976.

Une série de bulletins publiés par la Sous-section des estimations comprenaient les chiffres estimatifs de la population du Canada et des provinces au 1^{er} juin 1972, des estimations annuelles révisées de la population selon le sexe et l'âge pour le Canada et les provinces de 1921 à 1971, et des estimations trimestrielles de population pour le Canada et les provinces. Les estimations de la population pour les régions métropolitaines ont été préparées, mais elles n'ont pas été publiées. On a entrepris des études sur la possibilité d'utiliser les données des dossiers de l'impôt sur le revenu ou du régime frais médicaux pour estimer la migration et sur la méthodologie concernant l'estimation des migrants interprovinciaux.

La Section de la géographie a compilé des données démographiques pour les régions géostatistiques; elle a préparé des cartes de recensement, des dépliants et des publications et établi la base spatiale du géocodage des données du recensement de 1971 et l'ensemble des renseignements géographiques d'extraction des données géocodées. Pour 1976, la section a revu les programmes existants des régions géostatistiques; elle a étendu son programme en vue de mettre à jour annuellement les cartes de base du recensement et elle a mis sur pied deux nouveaux programmes, par exemple, les îlots de recensement.

En vue du recensement de 1976, on a évalué les besoins des utilisateurs et surtout ceux des ministères fédéraux et provinciaux. Une liste de questions a été préparée et acceptée par le cabinet en vue des recensements de la population et de l'agriculture en 1976.

La rédaction des manuels explicatifs des questions pour le recensement d'essai de 1974 va bon train.

La Section de la planification a aidé à définir les besoins des principaux programmes pour le Secteur du recensement et a coordonné dans un plan tactique la mise sur pied de programmes dans d'autres sous-sections. Son but principal a été de préparer des plans pour le recensement d'essai de 1974.

On a mis sur pied, en vue du recensement d'essai de 1974, un système exhaustif d'évaluation qui touchera le champ d'observation, la qualité des données, la justesse des méthodes et l'efficacité des procédés et de l'organisation. Un travail préliminaire semblable est en cours pour le recensement de 1976.

Le travail a progressé dans la Section des enquêtes associées au recensement dont le rôle est de planifier et de diriger les enquêtes spéciales rentables. Ces enquêtes sont établies d'après une base de données du recensement en vue de répondre à certains besoins des clients (les ministères publics, les municipalités, etc.) et visent à éprouver diverses méthodes de collecte

des données du recensement. Une enquête sur la main-d'œuvre hautement qualifiée aura lieu au mois de septembre 1973.

Division du revenu et des dépenses des consommateurs²

Cette division a terminé la publication d'un rapport spécial fondé sur les résultats d'une enquête de 1968 sur les finances des consommateurs (revenu pour 1967). Trois bulletins ont été publiés: une étude économétrique sur les revenus des familles au Canada en 1967, une étude sur les caractéristiques économiques de la population de 14-24 ans en 1967 et une autre sur l'équipement des ménages en 1968 d'après le revenu et d'autres caractéristiques.

L'enquête sur les finances des consommateurs effectuée en 1970 a servi à recueillir des données relatives au revenu et aux caractéristiques des familles de l'échantillon, de même que des données sur l'actif et l'endettement de ces familles. Le bulletin intitulé Répartitions du revenu au Canada selon la taille du revenu, 1969 a précédé la publication d'un bulletin sur le revenu des familles et des personnes hors famille: Family Incomes, (Census Families), 1969. Un volume important de données sur l'actif et l'endettement a été produit et le bulletin concernant les revenus, l'actif et l'endettement des familles au Canada, en 1969, sera publié au mois d'avril 1973. Un bulletin sur les familles à faible revenu et leur situation financière a été terminé et sera publié en 1973. Plusieurs études spéciales sont en cours.

En vue d'établir des répartitions fondées sur le revenu personnel selon le concept des comptes nationaux, on a réuni les dossiers de l'enquête sur les finances des consommateurs avec ceux de l'enquête de 1970 sur les dépenses des familles. Les dossiers officiels résultant de cet appariement renferment un éventail plus large de renseignements que les deux enquêtes prises distinctement. Les éléments de revenu oubliés seront ajoutés afin d'obtenir un concept modifié du revenu personnel. On peut alors soustraire les impôts directs et évaluer pour la première fois les répartitions de revenu des familles en se fondant sur leur revenu personnel net.

Si le projet réussit, les données expérimentales seront présentées aux Nations Unies où un projet semblable est en voie d'expérimentation. Sept pays compilent des estimations de répartition de revenu comparables. Ce projet dérive d'un travail expérimental concernant un système complémentaire aux comptes nationaux qui visera les aspects de répartition des revenus et des dépenses.

Les enquêtes sur les finances des consommateurs sont maintenant effectuées tous les ans. La première enquête annuelle a été menée en collaboration avec l'enquête sur la population active en avril 1972 et constitue la plus importante enquête intercensitaire sur le revenu jamais effectuée au Canada. Des données sont disponibles pour 30,000 ménages-échantillon. On a publié certaines données préliminaires sur le revenu, en octobre 1972, dans un bulletin traitant de la répartition du revenu au Canada

selon la taille du revenu, estimations préliminaires, 1971. Un bulletin régulier et détaillé sur le revenu sera publié en mai 1973 et sera suivi d'un autre bulletin sur le revenu des familles recensées. Certaines études spéciales seront également entreprises. Par exemple, on considérera le chômeur, son revenu et sa situation familiale.

Les données sur le revenu, la population active, les caractéristiques personnelles des familles d'environ 25,000 ménages-échantillon seront raccordées avec les données de l'enquête sur l'équipement ménager, afin de publier un bulletin semblable à celui qui traite de l'équipement ménager selon le revenu et d'autres caractéristiques en 1968. Les utilisateurs disposeront également de données sur la valeur du logement et le statut hypothécaire des ménages propriétaires et des données sur le loyer pour les ménages locataires.

On a terminé la planification de l'enquête du printemps de 1973 sur le revenu qui vise 12,000 ménages. En plus du questionnaire régulier sur le revenu, on posera aux répondants des questions sur les antécédents du travail à long terme, en s'attachant tout particulièrement aux arrêts de travail au cours des cinq dernières années. La permanence des informations est une variable importante pour expliquer le niveau des gains, mais on n'en dispose que rarement.

La division publiera plus tard, en 1973, un bulletin sur les estimations du revenu des petites régions pour les comtés. Un programme de recherche postcensitaire a été accepté: les études porteront sur les facteurs sous-jacents aux inégalités de revenu et sur la pauvreté, de même que sur les tendances de revenu au cours de la décennie 1961-1971. Ces études débiteront tard en 1973. Une partie des recherches permettra d'étudier les seuils de faible revenu en vue d'analyser la pauvreté.

La division a été représentée à une conférence des statisticiens européens qui a travaillé à un système de statistiques démographiques et sociales. Elle a aussi participé à des réunions de la Conférence des statisticiens des Caraïbes. Les membres du personnel ont également siégé à des comités de Statistique Canada qui ont travaillé sur les indicateurs sociaux, l'utilisation statistique des données de l'impôt sur le revenu, ainsi que la planification du recensement de 1976. Elle a collaboré à des études sur l'incidence et les avantages de l'impôt, ainsi que sur les simulations de changement de programmes.

À la suite de la réorganisation de Statistique Canada, le 1^{er} février 1973, le Service des recherches sur les finances des consommateurs a été fusionné avec la Section des dépenses des familles de la Division des prix pour devenir la Division du revenu et des dépenses des consommateurs. La division est chargée de toutes les enquêtes de ménages concernant le revenu et les dépenses et de l'application de programmes à long terme homogènes et compatibles dans ce domaine.

Division de l'éducation, des sciences et de la culture³

Au cours de l'année, la Division a précisé et

concrétisé ses nouveaux objectifs en adoptant des changements qui vont d'une nouvelle structure et une nouvelle orientation jusqu'à la production de ses publications régionales. Par suite de la réorganisation de Statistique Canada en 1973, le nom de la division a été changé pour celui de Division de l'éducation, des sciences et de la culture, afin de traduire de façon plus précise l'expansion de ses structures et de ses fonctions.

L'activité de la division porte sur l'enseignement primaire-secondaire et supérieur, sur la formation professionnelle-éducation permanente, en plus du domaine de la statistique sur la culture, les voyages et les sciences.

La division a entrepris de nouvelles enquêtes statistiques, notamment sur le transport scolaire, l'utilisation des organes de diffusion, les dépenses du gouvernement fédéral consacrées aux sciences humaines, l'aide fédérale aux étudiants, l'artisanat, les musées et les galeries d'art, les écoles d'arts, les prix littéraires canadiens, les loisirs, l'éducation physique dans les écoles, les traitements et titres des professeurs dans les collèges d'enseignement général et professionnel, les diplômes et certificats octroyés par les établissements canadiens qui confèrent des grades, les étudiants en sciences sociales, l'enseignement dans la langue de la minorité, les inscriptions dans les programmes d'études des conseils scolaires dans le cadre de l'éducation permanente, les effectifs scolaires permanents des collèges d'enseignement général et professionnel et des universités, la diminution des inscriptions aux universités, les études dans les camps de vacances, les endroits d'hébergement, les voyages et le tourisme, la statistique scientifique régionale, l'inventaire des installations de recherche et de développement et les études concernant les innovations techniques.

La division a aidé à mettre sur pied et à intégrer des systèmes de renseignements sur l'éducation destinés à fournir une base de données des principaux éléments concernant les élèves ou les étudiants, le personnel enseignant, les finances et les installations dans les universités et les collèges d'enseignement général et professionnel. Les concepts, classifications et définitions courants sont donnés pour faciliter les comparaisons. Des systèmes informatiques connexes sont en même temps mis sur pied.

Des profils et des analyses statistiques sur l'enseignement dans les provinces de l'Atlantique et les provinces de l'Ouest ont été préparés et d'autres études régionales sont en cours. Sont également en préparation les projets spéciaux suivants: L'éducation au Canada: Une perspective statistique; Une décennie des finances de l'éducation au Canada.

La division a entrepris une étude estimative de la main-d'oeuvre hautement qualifiée au Canada, en même temps qu'une enquête de l'aide fédérale et provinciale aux étudiants au Canada, et des travaux dans les domaines suivants: l'enseignement de la langue de la minorité, la diminution des inscriptions aux universités, les loisirs et l'éducation physique dans les écoles du Canada.

La division prépare actuellement une présentation consistant en six tableaux statistiques sur l'éducation devant servir à une réunion des sociétés savantes et éducatives.

En collaboration avec la Section du géocodage, la division a institué un programme de géocodage afin d'établir les caractéristiques sociales (établies d'après le recensement de 1971) des élèves ou étudiants appartenant à des régions de conseils scolaires particuliers.

La division a également joué un rôle important lors de l'analyse du projet de recensement étudiant de 1971. De plus, elle effectue une étude spéciale sur les caractéristiques socio-culturelles des écoliers du primaire et des élèves du secondaire. Une autre étude spéciale a été entreprise lorsqu'on a inclus dans le programme d'études analytiques du recensement de 1971 la stratification de l'éducation au Canada.

Un bulletin trimestriel des services de l'éducation continue de présenter des tableaux suivis d'une analyse et de commentaires. Ce bulletin contribue à la diffusion rapide de données actuelles sur l'enseignement tout en créant une image favorable de la division et de Statistique Canada.

Parmi les 44 publications bilingues qu'a publiées la Division de l'éducation, on retrouve 31 manuels, quatre bulletins hors série et neuf numéros du bulletin de service. On s'est aussi efforcé d'améliorer la qualité en fournissant des données plus actuelles, de meilleurs textes et une présentation graphique améliorée. La division a réétudié son programme de publications en effectuant une réorganisation complète des présentations tout en mettant l'accent sur des bulletins concernant les petites enquêtes.

Parmi les totalisations spéciales publiées annuellement, mentionnons l'échelle de rémunération des enseignants et professeurs dans les universités et collèges canadiens, les frais de scolarité et de subsistance dans les universités et collèges canadiens conférant des grades, la statistique des écoles de métiers privées, les cours de formation professionnelle de niveau supérieur dans des établissements de régie publique et le mouvement et l'immigration interprovinciaux des enfants au Canada.

Les manuels publiés comprennent une classification des disciplines scolaires, un fichier sur les données des élèves ou étudiants, le mode d'emploi de ce fichier, un dossier sur les données des enseignants et un fichier sur les données financières. Tous ces manuels font partie du nouveau système informatique de renseignements sur l'éducation. La division prépare également un manuel de référence concernant la publication des bulletins.

Division des opérations régionales

Dans les dernières années, le besoin d'un service réorganisé sur le terrain au sein de Statistique Canada est devenu évident. À la suite du changement de nom et selon les nouvelles responsabilités de 1971-1972, la réorganisation est entrée en vigueur le 15 janvier 1973. Par l'entremise de ses huit bureaux régionaux, la division est maintenant plus en mesure de répondre rapidement et de façon efficace aux

besoins des commanditaires et des utilisateurs.

La Sous-division des enquêtes s'occupe d'établir des méthodes de collecte des données en vue de l'enquête sur la population active et de toute autre enquête complémentaire. La collecte des prix de détail pour l'indice des prix à la consommation est un programme permanent, mais son univers est constamment remis à jour. En plus des enquêtes ordinaires visant les entreprises, de nouvelles enquêtes sont effectuées, par exemple, celle qui concerne l'origine et la destination du transport routier des marchandises. On mène une enquête sur les postes vacants et l'on établit de nouveaux programmes, par exemple, l'enquête sur la profession des salariés.

On a mis sur pied une section de projets spéciaux chargée des enquêtes spéciales et des enquêtes supplémentaires devant être effectuées sans long préavis, de même que des enquêtes à l'échelle régionale ou nationale. Au nombre des enquêtes spéciales les plus importantes, mentionnons l'enquête sur la nutrition au Canada, l'enquête sur la main-d'œuvre hautement qualifiée, l'enquête sur les dépenses des familles, l'enquête descriptive sur la superficie, le bétail et le revenu et l'enquête sur la réforme du cautionnement. Le personnel travaille à l'établissement d'un certain nombre de nouveaux programmes pour la collecte de données en 1973-1974.

La division s'occupe maintenant d'élaborer des méthodes visant la nouvelle enquête sur la population active, afin de donner une nouvelle perspective à la mesure des définitions changeantes des activités de la population active.

La Division des opérations régionales a maintenant l'entière responsabilité de mettre sur pied des procédés applicables sur le terrain et des programmes de formation pour les recensements d'essai et quinquennaux du Canada. On a commencé à organiser le recensement d'essai de 1974. Ce recensement conduira au recensement de 1976 qui retiendra l'approche fondamentale d'autodénombrement utilisée en 1971, mais qui renfermera un certain nombre d'améliorations de formes.

Des services internes fournissant personnel et crédits sont à la base des activités des sous-divisions d'enquêtes et de recensements, de même que de la formation centrale et des installations de contrôle des programmes.

Division de la santé et du bien-être

La Division de la santé et du bien-être comprend cinq sections principales: la Section de la statistique de l'état civil, la Section de l'hygiène mentale, la Section de l'hygiène publique, la Section des hôpitaux et la Section de la main-d'œuvre sanitaire. Chacune d'elles publie un large éventail de données sur la santé. Chaque section a aussi pour mission de faire des études spéciales et de voir à l'intégration des systèmes de données, aussi bien à l'intérieur qu'à l'extérieur de Statistique Canada.

La Section de la statistique de l'état civil est chargée de recueillir et de publier à intervalles réguliers des chiffres sur les naissances, les décès, la mortalité, les mariages et les

divorces qu'elle transmet aux provinces en vertu des ententes fédérales-provinciales.

Le nombre de demandes de renseignements n'ayant cessé de croître (particulièrement en ce qui a trait à la mortalité et aux caractéristiques concernant la nuptialité et la fécondité), la division a publié plusieurs études analytiques; d'autres sont prévues au sujet de questions aussi diverses que le cancer, les accidents, les maladies du cœur, la mortalité foetale et infantile, la nuptialité, la fécondité et l'espérance de vie.

Afin de réduire au minimum les pertes de temps et d'argent qu'occasionne le traitement des dossiers de l'état civil, la division a conclu des accords avec plusieurs provinces en vue de partager le coût de production des dossiers de base de l'ordinateur. De plus, elle compte diminuer davantage ses frais en mettant sur pied un système automatisé et des formules normalisées pour enregistrer les naissances, la mortalité, les mariages et les décès. Ces révisions nécessiteront un examen approfondi des programmes d'ordinateur et des présentations de traitement en cours. Les négociations se poursuivent avec les autorités provinciales afin d'établir une classification type des régions géographiques locales, ce qui facilitera la compilation des statistiques de base de l'état civil sur les naissances et les décès, surtout en ce qui concerne les projections démographiques.

La section est en train de mettre au point des techniques qui permettront de faire le lien de façon mécanographique entre les dossiers concernant les naissances, les mariages et les décès; ainsi, il sera possible de produire de nouvelles statistiques sur l'espacement des naissances, les tendances en fait de fécondité, la durée et les caractéristiques du mariage et du divorce, ainsi que la probabilité de survie des malades atteints de certaines maladies.

La section fournit également des services de secrétariat au Conseil de la statistique de l'état civil et à ses comités et étudie les problèmes qu'on lui soumet.

La Section de l'hygiène mentale recueille des renseignements sur les malades hospitalisés en psychiatrie au Canada. Le cinquième rapport annuel préliminaire sur l'hygiène mentale a paru en janvier 1973; on vient de terminer le rapport annuel détaillé pour 1971 à l'aide d'un nouveau système de traitement plus efficace des données statistiques. Un bulletin sur les malades psychiatriques entre 1966 et 1969 sera publié en 1973.

On a continué en 1972 le travail visant à rendre compte des changements récents qui sont survenus dans le domaine des soins psychiatriques en s'attachant aux foyers de réadaptation, aux services de nuit et de jour, etc.

La Section de l'hygiène publique a publié pour sa part des statistiques sur la morbidité individuelle soignée dans les hôpitaux, sur la tuberculose, les nouvelles localisations de tumeurs malignes, certaines maladies contagieuses et sur les avortements thérapeutiques. La statistique de la morbidité et de l'hygiène publique a fait l'objet d'un examen plus poussé lors du traitement des données reçues. Des bulletins ont été publiés sur le type de chirurgie effectuée et les traitements donnés. On a aussi

produit des totalisations spéciales sur la durée de séjour et le nombre de décès des patients, y compris les genres de maladies soignées à l'hôpital selon la subdivision géographique. La section a aussi publié une totalisation spéciale sur la tuberculose par comté et par division de recensement, outre une nouvelle totalisation établie d'après l'année et le pays d'origine des immigrants atteints de tuberculose.

On a préparé des totalisations sur l'incidence géographique de la statistique du cancer et commencé à organiser une étude spéciale qui sera faite en collaboration avec l'Institut national du cancer. Deux publications sur les avortements thérapeutiques ont paru en 1972. Un système de déclaration individuelle concernant les avortements thérapeutiques a été mis en vigueur dans huit provinces à compter du 1^{er} janvier 1973.

De concert avec le ministère de la Consommation et des Corporations, on a entrepris une étude qui visera à produire des statistiques sur les causes d'accidents.

On a publié le volume II de la Classification internationale des maladies, adaptée (International Classification of Diseases, Adapted), qui présente un index au volume I.

La Section des hôpitaux s'occupe d'analyser des données concernant les institutions et les aspects économiques concernant les hôpitaux canadiens.

On a réduit les délais de publication de la statistique hospitalière annuelle. La Liste canadienne des valeurs unitaires pour le travail de laboratoire clinique, qu'on utilise pour mesurer la charge de travail en laboratoire, a été revue conformément aux propositions du Comité des valeurs unitaires de l'Association canadienne des pathologistes. Des représentants des Antilles, de pays d'Amérique du Sud, du Royaume-Uni et d'autres pays ont montré quelque intérêt à ce système de valeurs unitaires.

La participation au système trimestriel d'information des hôpitaux s'est accrue en 1972; en effet, on a procédé à d'importantes révisions des termes se rapportant aux hôpitaux canadiens et l'on a incorporé des définitions aux statistiques du premier trimestre de 1973.

On a continué le travail d'élaboration de systèmes concernant le programme de fusion des statistiques sur la morbidité hospitalière. Ce programme vise à intégrer certaines données sur la morbidité et les opérations primaires des patients (données contenues dans les dossiers provinciaux) avec les données pertinentes sur les services hospitaliers, les installations, la dotation en personnel et les finances. Le premier bulletin renfermera une ventilation de 16 catégories de diagnostics selon le type et l'importance de l'hôpital pour 1969.

La Section de la main-d'œuvre sanitaire collecte des renseignements sur tous les aspects du personnel sanitaire. Au cours de l'année, cette section a mis au point deux nouvelles enquêtes, la première concernant les physiothérapeutes et l'autre portant sur les techniciens en radiologie. On a commencé à préparer une enquête sur les pharmaciens qui sera probablement effectuée à la fin de 1973.

Une enquête sur les services de soins spéciaux, visant les services médicaux et paramédicaux situés à l'extérieur des sphères institutionnelles traditionnelles (services de soins publics, foyers pour drogués, cliniques populaires), a été effectuée pour le compte du ministère de la Santé nationale et du Bien-être social à la fin de l'année 1971-1972. Les totalisations produites au cours de l'année présentaient une liste des services selon le nom, l'endroit, la catégorie, etc., de même que des données de base sur les services, le nombre de malades et le financement de ces services.

Division de la statistique judiciaire

Cette division, dont le rôle consiste à mesurer l'efficacité du processus judiciaire, de l'application de la loi, de la procédure juridique et des services de réhabilitation, a développé et amélioré sa production statistique de diverses façons au cours de l'année:

- L'Île-du-Prince-Édouard a adopté le programme de déclaration des prisons qui avait été conçu, à l'origine, pour le Québec et la Nouvelle-Écosse.
- Une publication portant sur une étude des meurtres échelonnée sur 10 ans est sortie.
- Les programmes de délais et de diagnostic pour les tribunaux et les établissements de correction ont été planifiés.
- L'ordonnancement de l'automatisation de tous les programmes a été établi.
- Une étude pilote sur les effets des lois sur la réforme du cautionnement a été entreprise, et
- Des dispositions pour faciliter les études spéciales ont été prises.

L'assistance-utilisateurs

La Division de l'assistance-utilisateurs, qui appartient au secteur de Diffusion et de promotion, a été créée dans le cadre de la réorganisation administrative de Statistique Canada, le 1^{er} février 1973. Ses principales fonctions consistent à:

- répondre aux demandes de renseignements et de conseils en provenance des utilisateurs et des fournisseurs de données;
- organiser et coordonner un service permanent de liaison avec les services gouvernementaux de tous niveaux, les entreprises, les pays étrangers et les organismes internationaux;
- développer et encourager l'utilisation des données;
- créer une Chambre de compensation, ou une informatique, statistique;
- améliorer les mécanismes d'information en retour afin d'obtenir des données sur les besoins nouveaux et changeants en matière statistique, ainsi qu'une évaluation de la qualité et de l'opportunité des données.

Les sommaires d'activité présentés ci-dessous décrivent les activités telles qu'elles existaient avant la réorganisation.

Promotion de l'information statistique

La promotion de l'information statistique s'est

poursuivie en 1972-1973 malgré l'avancement à des postes supérieurs, c'est-à-dire la perte pour la Section, de près de la moitié du personnel de celle-ci. Cette fonction de promotion a fait l'objet d'une étude approfondie par un groupe de spécialistes de Statistique Canada dont voici les recommandations. La première, qui a été approuvée, proposait de faire une étude générale des abonnés de Statistique Canada en vue d'arriver à une plus grande efficacité de la diffusion. Une seconde recommandation, actuellement en cours d'étude, préconise une étude exhaustive des demandes de renseignements adressées au bureau.

Afin de mieux connaître les services offerts par le United States Bureau of the Census, un membre du personnel a assisté à Washington à un colloque intergouvernemental d'une semaine. Par ailleurs, à Ottawa, un représentant de l'Australian Bureau of Census Statistics a passé plusieurs mois à étudier le système canadien.

Des colloques tenus d'un bout à l'autre du Canada, organisés de concert avec les divisions spécialisées, ont surtout porté cette année sur la statistique du travail et les résultats du Recensement de l'agriculture de 1971. Un atelier sur la statistique chimique devait avoir lieu à la fin de l'année 1973.

On a entrepris la mise à jour de la brochure "Profiteons de la statistique" constituée d'une série d'études de cas à l'usage des exploitants et propriétaires d'entreprises.

Le service a préparé, pour la revue de l'Institut canadien de comptables agréés, un article sur l'utilisation par les entreprises des statistiques financières fédérales.

Division des services consultatifs et de liaison avec les provinces

La Division a rempli des fonctions de coordination et accompli des tâches de secrétariat à un certain nombre de réunions de comités lors de la Septième conférence fédérale-provinciale sur la statistique économique. Les membres du personnel ont assisté à plusieurs conférences fédérales-provinciales; ils ont également participé à l'organisation et au déroulement de sessions conjointes de travail avec le personnel des organismes statistiques provinciaux.

Après la proclamation de la nouvelle Loi fédérale sur la statistique, la Division a été invitée à réviser les accords de coopération existant entre le gouvernement fédéral et les gouvernements provinciaux en matière de statistique et à en établir de nouveaux. Plusieurs de ces accords ont été approuvés officiellement.

La Division a entrepris des recherches pour essayer de déterminer quelles seront l'offre et la demande de statisticiens au Canada dans les années à venir. Les statisticiens provinciaux pourront désormais recevoir un supplément de formation au sein même de Statistique Canada. Un agent de liaison provincial et un membre du personnel de recherche ont été prêtés pour deux mois à l'Île-du-Prince-Édouard afin d'y étudier l'organisation et l'utilisation de données provenant des fichiers administratifs des ministères provinciaux. Un autre membre du person-

nel a été prêté au gouvernement de la Saskatchewan pour trois mois afin d'aider à définir le mandat du nouveau Centre d'information statistique.

La Division a réalisé, de concert avec les administrations provinciales et municipales, plusieurs projets conjoints, dont le Programme conjoint de recherche d'Halifax.

Outre les visites que notre personnel rend aux provinces, un bulletin officiel de nouvelles, *Actualité statistique fédérale-provinciale*, est publié à l'intention des délégués à la Conférence fédérale-provinciale sur la statistique économique; il contient des informations tant sur le bureau lui-même que sur les provinciaux.

Au cours de la plus grande partie de l'année, la Division a également été le centre nerveux de la statistique des voyages. Un certain nombre de programmes ont été réalisés, y compris la publication d'un nouvel annuaire, intitulé *Voyages, tourisme et loisirs de plein air — Résumé statistique*, dont le principal but est de rassembler toutes les données de Statistique Canada sur les voyages et de les compléter au moyen des renseignements en provenance des autres ministères et des organismes internationaux.

Une autre tâche très importante réalisée par la Division en collaboration avec la Direction générale du tourisme (ITC) et la Direction de la méthodologie et des systèmes de Statistique Canada, fut le développement du fonds de données statistiques sur les voyages. Elle a contribué notamment à la planification et à l'élaboration de tableaux récapitulatifs des données de l'Enquête de 1971 sur les voyages des Canadiens.

À la suite de la réorganisation de Statistique Canada, le personnel responsable de la statistique des voyages a été transféré à la Division de l'éducation, de la science et de la culture, au sein de laquelle a été créée une nouvelle section chargée des fonctions de coordination et qui a assumé la responsabilité des différents domaines du secteur qui n'avaient pas encore été attribués à d'autres Divisions.

Section des renseignements

La Section des renseignements a répondu à quelque 2,000 demandes de renseignements par mois. Elle a publié l'édition de 1972 du Catalogue des publications de Statistique Canada, important guide de l'utilisateur comportant deux index séparés, l'un en français et l'autre en anglais. Le manuscrit du catalogue est tenu méticuleusement à jour en vue de la prochaine édition. On publie régulièrement des suppléments au catalogue afin d'y inclure les données les plus récentes.

* Après la clôture de l'année financière, le recensement est devenu un secteur distinct relevant d'un statisticien en chef adjoint.

- 1 Auparavant la Division du recensement.
- 2 Auparavant Recherches sur les finances des consommateurs.
- 3 Auparavant Division de l'éducation.

Partie 2 : Groupes de gestion et de services centraux

Services d'intégration et de développement

Ce groupe fournit divers services centralisés aux directions spécialisées et veille à améliorer la qualité, l'efficacité et la cohérence de l'appareil statistique national.

- **Division des profils et des registres d'entreprises**
- **Expert-conseil en recherche démographique**
- **Division de la recherche et du développement en statistiques régionales et urbaines**
- **Bureau du conseiller supérieur en intégration**

Division des profils et des registres d'entreprise¹

Le travail de la division vise trois domaines principaux :

- La Section de la classification tient à jour, révisé et adapte les systèmes de classification statistiques existants et crée de nouvelles classifications;
- La Section de l'intégration sociétés-établissements s'occupe de faire la relation entre les statistiques fondées sur des enquêtes sur les établissements et les statistiques provenant des états financiers des sociétés;
- La Section des registres centraux s'occupe d'élaborer et de tenir une liste centrale de toutes les entreprises, institutions et organisations de nature similaire qui participent à l'activité économique du Canada.

Section de la classification

La Section de la classification est chargée de la Classification des activités économiques, de la Classification type des marchandises, de la Classification géographique type, de la Classification canadienne descriptive des professions et de la recherche en ce domaine. Les classifications sont essentielles à l'intégration des données statistiques, car elles facilitent la comparaison des données et aident à déceler les lacunes

et les chevauchements du champ d'observation.

Le personnel de la Classification des professions a participé très activement en donnant des conseils sur les problèmes qui peuvent surgir lors de l'établissement d'une classification des professions et en mettant sur pied et en organisant un service central de commis dans la Division du travail pour le codage des données sur les professions. Le travail qui a été entrepris porte sur la relation entre les classifications des professions, sur les postes repères concernant les catégories de rémunération de la Fonction publique fédérale en relation avec l'enquête sur la profession des salariés, ainsi que sur les définitions détaillées des professions que renferme la **Classification canadienne descriptive des professions**. Le travail de classification industrielle a surtout consisté à répondre aux demandes et à résoudre les cas difficiles.

La section a publié le volume 1 de la **Classification des activités économiques** (révisée). Le personnel travaille maintenant à établir l'index alphabétique et numérique, ainsi qu'une bande principale d'ordinateur pour la tenue de cet index. La bande fera le lien entre les codes-types des marchandises et les diverses classifications connexes utilisées à Statistique Canada.

La section a aussi publié une addition provisoire à la **Classification géographique type**

et a préparé une édition spéciale en vue de coder les données sur la statistique de l'état civil en Ontario. Le fichier principal a été mis à jour et étendu de 28,000 à 38,000 codes géographiques. On procède à la rédaction de programmes et à la composition de cartes pour préparer la publication d'une édition qui sera vendue au public.

L'établissement de la Classification type des services a atteint la seconde étape de la rédaction.

Section de l'intégration sociétés-établissements

Au cours de l'année financière, deux gros échantillons d'environ 20,000 cas ont été utilisés pour évaluer la relation qui existait entre les données de l'impôt sur le revenu et les données des questionnaires d'enquête actuels. Le premier échantillon consistait en déclarations d'impôt d'entreprises agricoles et les données obtenues servent maintenant à la Division de l'agriculture comme source indépendante de données; elles servent aussi aux séries statistiques courantes.

Le second échantillon renferme des sous-ensembles provenant de toutes les autres activités économiques. Les études portant sur la réalisation possible ont donné de bons résultats en nous fournissant des codes industriels et

géographiques pour les entreprises non constituées en sociétés à partir des états financiers des déclarations sur le revenu et de l'analyse de données statistiques connexes.

On projette actuellement d'utiliser les déclarations d'impôt de 1973 des non-répondants et de certains répondants pour les divisions suivantes: transport, construction, industries manufacturières et primaires. On espère ainsi relever la qualité des statistiques de 1973 et réduire le fardeau que la réponse au questionnaire impose au répondant, en 1974.

Sous-division des registres d'entreprises

La Sous-division des registres d'entreprises s'occupe de constituer le registre des entreprises qui fournissent la base nécessaire pour établir une classification homogène et contrôler le champ d'observation des enquêtes sur les entreprises. Ce registre remplace la liste centrale des sociétés et des établissements et étend beaucoup plus la gamme des services disponibles aux divisions chargées des enquêtes.

La liste centrale est devenue très difficile à tenir. Aussi l'élimine-t-on graduellement par suite du transfert au ministère du Revenu national des employeurs inscrits dans les dossiers de la Commission d'assurance-chômage. Ce procédé de base servira à enregistrer les nouvelles entreprises. La liste centrale est remplacée par le registre d'entreprises et au fur et à mesure qu'on procédait au remplacement des diverses fonctions, l'opération de la liste centrale parallèle cessait. Le travail qui s'est fait jusqu'à maintenant comprend les points suivants:

1. Attribution de numéros aux nouvelles entreprises aux niveaux de la société et de l'établissement;
2. Tenue à jour d'une liste des noms et adresses;
3. Maintien d'un index visuel complet sur micro-fiches.

L'index des fiches de la liste centrale est microfilmé pour les archives. Le dossier du maintien de la liste centrale par ordinateur a été fermé le 1^{er} janvier 1973.

On a mis au point les systèmes informatiques des registres d'entreprises et on projette maintenant de les réviser.

Le registre renferme:

1. Un dossier sur chacun des quelques 500,000 comptes de retenue sur la paye;
2. Un dossier sur chacun des éléments de la liste d'enquête ES 1 (grands employeurs) qui donne lieu au besoin à une structure multiple;
3. Un certain nombre de dossiers spéciaux visant à rassembler les comptes multiples de retenue sur la paye d'une même entreprise lorsque l'opération n'est pas effectuée dans la structure ES.

Le travail de la sous-division consiste à:

1. Effectuer le traitement de la nature des déclarations d'entreprises à partir des nouveaux comptes de retenue sur la paye;
2. Enlever les doubles comptes des listes de comptes de retenue sur la paye en établissant les situations multiples de comptes de retenue sur la paye et en les inscrivant comme il faut;

3. Rapprocher le contenu du registre des entreprises avec la liste des déclarations d'impôt des sociétés constituées (T 2), ministère du Revenu national, afin d'étendre le champ d'observation des registres pour tenir compte de toutes les sociétés et tous les employeurs (selon la définition des comptes de retenue sur la paye);

4. Fournir les services obtenus grâce à l'ancienne liste centrale, y compris le codage de la CAE et de la CGT et l'attribution de numéros aux entreprises qui seront inclus dans divers fichiers d'enquêtes.

La sous-division procède actuellement à l'épuration du contenu des registres, afin d'établir une liste d'entreprises complète et sans double compte au pays. Cette liste renfermera les dossiers T 2 et les dossiers dérivés des comptes de retenue sur la paye. Une entreprise est définie par la formule T 2, si elle est constituée en société, ou par un compte de retenue sur la paye ou un groupe de comptes, si elle n'est pas constituée en société. Le travail aura progressé de façon satisfaisante d'ici la fin de 1973.

Au cours de la prochaine année, on projette un certain nombre de nouvelles activités, entre autres:

1. Le rapprochement de la liste des industries manufacturières et primaires avec le registre;
2. Opérations de rapprochement entre le registre et la liste servant au recensement du commerce et des services;
3. La réalisation d'essais pour étendre le champ d'observation du registre, afin de tenir compte des entreprises non constituées en sociétés sans comptes de retenue sur la paye;
4. L'établissement de techniques d'exploitation pour traiter de façon plus efficace les données qui entrent dans le registre et améliorer les méthodes d'accès au contenu du registre.

La reconnaissance optique des caractères (ROC) dans les déclarations sur la nature des entreprises n'a pas donné les résultats escomptés avec les documents actuels et la préparation des données. En attendant que de nouvelles formules soient établies et qu'on révalue les techniques, on préparera ces données sur des cartes perforées.

Un projet de directive interne concernant l'établissement et l'utilisation du registre des entreprises et les opérations connexes sur les profils circule à Statistique Canada.

Réorganisation

Lors de la réorganisation de Statistique Canada, en février, la Section de la classification a quitté la division pour former le noyau de la Division des normes. En plus d'avoir à s'occuper de classification, la nouvelle division se chargera d'établir la terminologie type des questionnaires d'enquête. Le reste de la division s'est fusionné avec la Section des profils de la Direction de la statistique économique. Elle porte maintenant le nom de Division des profils et des registres d'entreprises. Cette division se compose de la Sous-division des registres d'entreprises (auparavant la Section des registres centraux), de la Sous-division de l'accès aux dossiers fiscaux —

attribution spéciale (auparavant la Section de l'intégration sociétés-établissements) — et la Sous-division des profils (auparavant chargée de la définition des profils au sein de la Direction de la statistique économique).

Expert-conseil en recherche démographique

Cette année, l'expert-conseil en recherche démographique a consacré beaucoup de temps à la mise en oeuvre d'un autre projet du gouvernement fédéral visant entre autres à une simulation de changements démographiques et à l'élaboration de spécifications aux fins d'un système de statistiques démographiques et sociales et à la planification d'études analytiques fondées sur les données du recensement de 1971.

Le service a préparé des données élémentaires destinées à un modèle produisant des fichiers individuels simulés tirés d'un échantillon hypothétique de la population canadienne. Ce modèle a pour objet de simuler les changements qui surviennent dans la composition démographique à partir de renseignements recueillis au niveau individuel. Les variantes de la composition démographique comprennent l'âge, l'état matrimonial, la situation vis-à-vis de l'activité et le niveau de scolarité. Le modèle avait d'abord été mis au point pour l'Ontario à l'Institut for Quantitative Analysis of Economic and Social Policy (l'Institut de l'analyse quantitative de la politique économique et sociale) de l'Université de Toronto; il a par la suite été modifié pour servir à l'échelle nationale avec le concours de l'expert-conseil en recherche démographique.

L'expert-conseil a élaboré les plans d'un système de statistiques sociales et démographiques de même que deux autres documents énonçant les améliorations souhaitables à apporter aux statistiques relatives à la croissance démographique en général et à la fécondité en particulier. Le système se fonde sur des concepts fondamentaux destinés à englober des directives relatives à certains aspects de la préparation à venir des données de Statistique Canada.

En ce qui a trait à la mise au point des études analytiques fondées sur les données du recensement de 1971, l'expert-conseil a présidé le Comité de recherche permanent du recensement et a dirigé le groupe d'étude sur les auteurs et les sujets des travaux de recherche pour 1971. Le personnel attaché au bureau de l'expert-conseil a également élaboré des concepts fondamentaux pour l'analyse globale des activités de recherche et du système connexe des activités de planification.

L'expert-conseil a présidé les réunions du Comité technique interdivisionnaire des prévisions et le Sous-comité des projections démographiques. Il a de plus entrepris l'étude des plans de la division relatifs au travail à venir sur les prévisions.

Enfin, l'expert-conseil a fourni des conseils et des rapports scientifiques à la demande de plusieurs organismes dont le ministère d'État

aux Affaires urbaines, le Conseil économique du Canada, le Conseil privé et le ministère des Finances.

Recherche et développement en statistiques urbaines et régionales

La réorganisation de Statistique Canada a permis d'étendre le programme de statistiques régionales afin que celui-ci comprenne les villes et les régions avoisinantes; il a été intégré au système des comptes nationaux (structurels) pour permettre la coordination des programmes de recherche connexes.

Les structures régionales et urbaines d'entrées-sorties constituent maintenant un des cadres analytiques du programme actuel. À l'aide des données de 1966, on a entrepris la constitution d'un ensemble de tableaux des entrées-sorties à l'échelle provinciale qui sera compatible avec le tableau national. Dans le domaine de la statistique urbaine, on a aussi entrepris la conception d'un cadre analytique qui permettra de classer les renseignements et d'évaluer les besoins en matière de données urbaines.

Le travail le plus important effectué avant la réorganisation a été la construction et l'essai d'un modèle régional pour évaluer la population et la migration actuelles. On a entrepris la correction du modèle pour augmenter son rendement. Le grand avantage de ce modèle, en plus de fournir des estimations sur la répartition par âge et par sexe de la population des comtés, est sa capacité de produire des estimations des courants migratoires d'une année à l'autre.

On a terminé les travaux de recherche suivants:

- De concert avec le Manitoba, sur la possibilité d'utiliser les renseignements fournis par la province pour estimer la population des petites régions; et
- De concert avec la Nouvelle-Écosse, sur la possibilité d'utiliser les renseignements fournis par la province pour estimer la vente au détail au niveau infraprovincial.

À la fin de l'année, on a repris, conjointement avec les autres divisions de Statistique Canada et organismes du gouvernement fédéral, les travaux préliminaires relatifs aux estimations sur le chômage régional.

Bureau du conseiller supérieur en intégration

Le bureau a rédigé et a distribué au cours de l'année financière la première ébauche d'un abrégé de statistiques sociales comprenant environ la moitié des chapitres prévus.

Statistique Canada a participé aux délibérations sur les indicateurs sociaux et systèmes de statistiques démographiques de groupes de travail de l'O.C.D.E. et de la Conférence des statisticiens européens. Ce dernier travail a continué dans l'ensemble l'élaboration des études de statistiques sociales qui avaient débuté précédemment. Statistique Canada a aussi participé à une conférence d'experts sur les indicateurs sociaux tenue par le Conseil de recherche en sciences sociales, ainsi qu'à diverses autres

conférences du genre ou à des réunions de sociétés savantes au Canada. Des discussions concernant les indicateurs sociaux ont également eu lieu avec plusieurs provinces.

On s'est entretenu avec le ministère de l'Environnement pour étendre une base de données. Statistique Canada a fait partie d'un groupe de travail chargé d'établir un indice qualitatif global de l'environnement. Le service a entrepris un programme de statistiques fondées sur des données contenues dans les dossiers d'Environnement Canada, faisant état des frais d'immobilisation et d'amortissement découlant du matériel utilisé pour lutter contre la pollution; l'application de ce programme a été confiée à la division CALURA. Un exposé préliminaire délimitant le cadre de travail général concernant l'établissement de données sur l'environnement a été préparé. Statistique Canada a également été représenté à un groupe de travail de la Conférence des statisticiens européens dont le thème d'étude portait sur la statistique de l'environnement. On a étudié la possibilité de construire des indicateurs urbains de l'environnement à partir de la base des données urbaines existantes.

1 Classification centrale et Intégration sociétés-établissements qui comprenait auparavant la Section de la classification et fait maintenant partie de la Division des normes.

Direction de la méthodologie et des systèmes

Cette direction a pour tâche de mettre au point des méthodes d'enquête et des systèmes et programmes informatiques pour le traitement des données. Elle entreprend également des travaux de recherche appliquée sur tous les aspects de l'automatisation intéressant le traitement de l'information statistique.

- **Division des systèmes informatiques**
- **Service des méthodes d'enquêtes "entreprises"**
- **Service des méthodes de recensement et d'enquêtes "institutions"**
- **Service d'élaboration d'enquêtes "ménages"**

Division des systèmes informatiques

Le personnel des Systèmes généraux d'enquêtes, la Section de géographie du recensement et 15 dirigeants de régions métropolitaines ont participé cette année à un travail d'équipe qui a permis à Statistique Canada d'expérimenter pour la première fois le système de géocodage (GRDSR) mis au point au cours des quatre dernières années. Ce système a captivé l'imagination d'un grand nombre de personnes lorsqu'il s'est agi de répondre aux demandes de totalisations des ministères fédéraux, du secteur privé et d'autres utilisateurs, dépassant ainsi les prévisions les plus optimistes.

Un autre effort collectif a permis de mener à terme un projet de rapprochement de la statistique du commerce extérieur Canada-États-Unis visant à cerner la cause des écarts rencontrés dans les statistiques commerciales des deux pays. Le projet avait également pour but d'évaluer dans le temps la stabilité de ces causes, par exemple les mises au point de la classification et de la valeur.

On a fait des progrès dans les techniques de photocomposition, particulièrement en ce qui concerne l'utilisation automatique des accents de la langue française. Il a été possible d'obte-

nir, pour la première fois, une photocomposition complètement bilingue, produite directement par ordinateur, sans intervention humaine. Outre les accents, cette photocomposition incorpore les minuscules et les majuscules, l'assortiment multiple des caractères, les renvois, etc., pour ainsi apporter une amélioration marquée des délais, une réduction sensible du coût de production et enfin un produit de qualité. Grâce à cette méthode, on est actuellement en mesure de produire un plus grand nombre de publications.

Le Système canadien d'informatique socio-économique (CANSIM) a été doté d'une capacité additionnelle d'extraction. La base de données des séries chronologiques a été directement rattachée au Bureau des services informatiques et peut être utilisée par les ministères et les organismes fédéraux au moyen de terminaux à distance.

La division s'attache surtout à intégrer certains procédés de moindre importance dans des systèmes plus complets et plus souples qui utilisent des codes types, un traitement par bloc, des programmes généralisés et, dans certains cas, des systèmes de gestion de la base des données complètes. Cette méthode a porté fruit, en particulier lorsqu'on a pu relier des modules généralisés à de vastes segments de systèmes automatisés, sans pour autant devoir

effectuer de vastes programmations sur commande.

Le groupe de soutien du système du recensement a fait porter ses efforts vers l'automatisation du programme de diffusion et de publication des données du recensement par l'utilisation du système d'extraction STATPAK (base des données du recensement), de quelques programmes généraux et d'un ensemble d'échanges par voie de terminaux. Ce système fournit d'excellentes réponses aux demandes de données sur le recensement et permet également de produire des totalisations de haute qualité par photocomposition. Dans les autres domaines où les efforts d'intégration ont été notables, mentionnons la santé et le bien-être, où l'on a effectué un travail dans le domaine conceptuel sur l'intégration, en éducation, où des systèmes provinciaux de moindre envergure ont été intégrés aux systèmes nationaux et dans les statistiques sur la population active, où de nouveaux projets d'intégration sont en voie de réalisation pour le recensement de 1976.

Le défi que représentait l'utilisation à une plus grande échelle des systèmes de gestion de la base des données a amené la création d'un groupe affecté à l'administration des données et à la nomination d'un administrateur de données. Ce groupe commence à utiliser un système d'administration de données en vue de consi-

gner la documentation sur les fichiers afin d'assurer un contrôle et une sécurité appropriés. On prévoit que ce groupe jouera un rôle de première importance au fur et à mesure que l'utilisation des bases de données intégrées progressera.

Méthodes d'enquêtes "entreprises"

Cette division est chargée des services des méthodes d'enquête et, dans certains cas, de la conception et de la mise au point de systèmes. Elle s'emploie activement à favoriser l'intégration des méthodes et des systèmes établis en matière d'enquête dans tout le secteur des entreprises.

La division a joué un rôle de premier plan dans la mise au point du système des registres d'entreprises. Ce système, qui est actuellement en pleine application possède un fichier étendu couvrant pratiquement tout l'univers des enquêtes sur les entreprises et mis à jour tous les mois. On commence à mettre plutôt l'accent sur l'élaboration de systèmes touchant les organes qui utilisent des registres d'entreprises dans leurs activités courantes ou qui fournissent des renseignements essentiels au système.

Ces systèmes se divisent en deux catégories: il y a d'abord ceux qui visent la définition du profil des entreprises à établissements multiples en vue de les regrouper en unités déclarantes et ceux qui ont trait au contrôle des opérations d'enquête. Ces derniers systèmes, connus sous le nom de systèmes du fichier principal de la division, seront normalisés le plus possible en dépit de la diversité des exigences. Il faut en particulier une présentation uniforme des dossiers et une structure au fichier.

Le service des méthodes d'enquêtes "entreprises" a continué d'apporter des améliorations à la nouvelle enquête sur le commerce de détail. Ce système d'enquête fonctionne de façon satisfaisante depuis le début de 1972 malgré les problèmes que pose la délimitation de son univers. Toutefois, le ministère du Revenu national a remplacé la Commission d'assurance-chômage comme source principale de renseignements sur les nouvelles entreprises, ce qui a donné lieu à un problème de continuité qui ne s'est résolu qu'après un an.

La Division des méthodes d'enquêtes "entreprises" et la Division du commerce et des services ont pris part à la réalisation du recensement de même qu'à l'évaluation des données qui s'y rapportent. En premier lieu, la division a participé à l'élaboration et à l'application de méthodes de suivi conçues pour les non-répondants, à la conception de techniques de contrôle et d'imputation informatique des données ainsi qu'au maintien des listes et à l'établissement de procédures d'amélioration.

En deuxième lieu, elle s'est occupée du contrôle qualitatif des opérations de codage et du fonctionnement du système, de l'évaluation des erreurs d'observation et de contenu et des techniques de contrôle et d'imputation des données.

Pour ce qui est des industries manufacturières et primaires, la division a préparé des spécifications relatives à un système de fichier

principal en vue a) de servir de plan de jonction avec le système des registres d'entreprises et b) de contrôler la préparation des enquêtes menées dans cette division. Ces spécifications devraient entrer en vigueur bientôt. La version révisée de l'enquête sur les livraisons courantes, les stocks et les commandes a été mise en pratique et semble donner de bons résultats.

Les premières spécifications relatives à un module de contrôle et d'imputation des données sur le système du recensement des industries manufacturières ont été étudiées, et les travaux préliminaires, entrepris.

Quant au domaine des finances des entreprises (CALURA), la division a mis au point des algorithmes appropriés pour la délimitation des complexes de sociétés selon l'appartenance et pour la détermination du contrôle et de l'appartenance en ce qui concerne les non-résidents. Les systèmes informatiques prévus pour l'application de ces algorithmes sont actuellement utilisés dans la pratique. Un nouveau plan d'échantillonnage destiné à la sélection et au traitement des états financiers des sociétés (formules de déclarations d'impôt T2) a été mis en oeuvre: il visera les déclarations d'impôt pour 1972. On s'attend à ce que la statistique financière qui en découlera soit plus complète.

À la Division du travail, les méthodes et le système touchant l'enquête sur les postes vacants maintenant effectuée deux fois par mois n'ont cessé de s'améliorer. La continuité des recherches dans le cadre de la structure établie vise à améliorer l'efficacité des statistiques.

La Division du travail a également mis au point, à titre d'expérience, les méthodes et les systèmes informatiques nécessaires à l'enquête sur la profession des salariés et elle poursuivra son travail dans ce sens.

Des versions révisées de certaines sous-sections des enquêtes sur l'emploi (ES 1 et ES 2) ont été élaborées et éprouvées. Des problèmes ont gêné la bonne marche de ces enquêtes en raison surtout du fait que le ministère du Revenu national a remplacé la Commission d'assurance-chômage comme source de certains renseignements essentiels. La division met actuellement au point des techniques visant à résoudre ces problèmes.

Pour ce qui est de la Division des transports et des communications, la Division des méthodes d'enquêtes "entreprises" a contribué à la conception, à la mise en pratique et à l'analyse de l'enquête sur l'origine et la destination des transports routiers de marchandises pour compte d'autrui et en location instituée en 1971 et destinée à devenir une enquête annuelle. On apporte sans cesse des modifications et des améliorations aux méthodes utilisées.

Méthodes de recensement et d'enquêtes "institutions"

Introduction

Le travail de la division ici en cause touche la conception et l'évaluation des enquêtes dans les divisions du recensement, de l'agriculture, de l'éducation et du dépouillement des données; elle se charge également de certains projets dont les frais sont remboursés.

Recensement

L'évaluation du recensement de 1971 se poursuit toujours normalement et l'évaluation du recensement d'essai de 1974 et du recensement de 1976 est annoncée. Les méthodes et les procédés prévus pour 1976 sont également en voie de réalisation.

L'évaluation du recensement de la population de 1971 a permis de saisir les erreurs d'observation par la méthode de contre-vérification des dossiers et les erreurs d'échantillonnage au moyen de l'étude de la variance des réponses. La vérification qualitative que nous avons établie en agriculture visait à évaluer la variance de réponse et la variance d'échantillonnage, de même que les erreurs d'observation et de déclaration dans le recensement de l'agriculture, en 1971. Nombre de petits projets ont été entrepris dont certains relevaient de cette division (variance des codeurs, changement d'adresse, biais de livraison, dénombrement des résidents temporaires). Tous les grands projets et la plupart des petits étaient terminés (par exemple, le dénombrement des résidents temporaires) ou près de l'être. Des services de consultation ont bien sûr été fournis à de nombreux autres projets d'évaluation concernant le recensement.

La Division du recensement et la présente division ont esquissé un programme d'évaluation pour le recensement d'essai de 1974 et le recensement de 1976. L'évaluation du recensement d'essai doit être terminée trois mois avant le début de ce recensement, pour utilisation en 1976. Par conséquent, cette évaluation sera intégrée autant que possible dans les opérations elles-mêmes. Nombre de projets de 1971 ne changeront pas et au moins deux nouveaux seront ajoutés. Le premier est une étude du taux de réponse qui visera à établir le taux de réponse par question inscrite sur les questionnaires au fur et à mesure qu'ils parviendront au bureau central; alors seront extraits les renseignements fournis dans ces questionnaires et insérés dans un système d'information avant que commence la saisie des données. Ces renseignements aideront à établir les limites de non-réponse pour les questionnaires traités au moyen du FOSDIC. L'autre projet concernera l'évaluation des données saisies par le FOSDIC et le microfilm. La vérification qualitative en agriculture ne fera pas l'objet d'un projet séparé en 1976, mais sera plutôt incorporée à l'enquête descriptive annuelle sur l'agriculture.

Il a été décidé d'utiliser la méthode d'échantillonnage au recensement de 1976 et des questionnaires unilingues; mais on s'assurera que les gens pourront utiliser la langue officielle de leur choix. La base d'un système amélioré pour le contrôle du traitement dans les opérations de saisies des données en 1974 et en 1976 a été élaborée et son cadre général a été accepté en principe. De plus, on a conçu une nouvelle vérification informatique par laquelle la vérification doit être faite avant que débute la correction automatique des données.

L'évaluation des procédés du recensement de 1971 a fait voir le besoin a) d'étendre le champ du contrôle qualitatif, afin de tenir

compte de la qualité intégrale de la collecte des données au niveau des S.D. (y compris les refus et les non-réponses de tout genre) et b) de mettre sur pied des projets de contrôle qualitatif plus efficaces.

En ce qui concerne a), on a appliqué plus rigoureusement les procédés, afin de permettre aux techniciens du contrôle qualitatif de mesurer l'ampleur des difficultés et de rejeter les S.D. qui comportaient des taux excessifs de refus ou de non-réponses. Pour ce qui est de b), on a accepté en principe un projet d'échantillonnage sélectif visant à établir un projet de contrôle qualitatif plus efficace et plus particulier.

Le recensement de 1971 a fait voir l'importance de meilleures procédures de contrôle en ce qui concerne le codage dans les bureaux régionaux. Des procédures révisées ont été mises à l'essai lors d'un projet de codage sur "le lieu de travail" pour la ville de Calgary, ce qui a aidé à voir le besoin de nombreuses autres procédures de codage.

Agriculture

Cette division a aidé la Division de l'agriculture à établir la méthodologie de plusieurs enquêtes, y compris les enquêtes sur le bétail et sur les objectifs de rendement. Le gros du travail est centré sur l'enquête-échantillon descriptive concernant le bétail et les cultures qui pourra être intégrée avec l'enquête annuelle sur les cultures en juin. Amorcé en 1972, ce travail était considéré comme un projet-pilote. Les estimations de certains éléments qui n'étaient pas compris dans le programme permanent de la Division de l'agriculture ont toutefois parues assez sûres pour permettre leur parution. L'évaluation de cette première enquête a été effectuée en 1972 et la planification est maintenant très avancée pour 1973. On étudie également la possibilité de réviser entièrement l'enquête de 1974 qu'on appliquera d'abord en Ontario à cause de son large éventail de produits agricoles. La révision proposée est presque achevée et les autres provinces emboîtent rapidement le pas lorsqu'elle sera terminée.

L'intégration de cette enquête d'échantillon régional avec les enquêtes postales de la Division de l'agriculture ne sera possible qu'après avoir établi des procédés visant à s'assurer que les répondants à ces deux enquêtes ne seront pas considérés deux fois. On a entrepris des recherches sur les problèmes de double emploi et une étude sera faite sur les diverses méthodes d'appariement. On a presque terminé une adaptation du système informatique mis au point par la Division des méthodes d'enquête "entreprises"; l'évaluation se poursuit dans le cas des données du recensement de l'agriculture de 1971 et de l'enquête postcensitaire sur l'agriculture, en 1971, qui ont été appariées manuellement à l'aide des données fournies par la Saskatchewan.

Une étude est effectuée sur la valeur des différentes méthodes d'estimation (ce qu'on appelle les estimations fermées, ouvertes ou pondérées des segments) pour divers produits agricoles.

Projets (frais remboursés)

Les principaux projets à frais remboursés ici en cause ont été les suivants: enquête sur les nouveaux effectifs scolaires, sur la main-d'œuvre hautement qualifiée et sur la Loi sur la réforme du cautionnement.

L'enquête sur les nouveaux effectifs scolaires, qui visait à mesurer le nombre des départs au niveau universitaire et leurs caractéristiques, a été terminée au cours de l'été; le Conseil du Trésor devait publier un bulletin se fondant sur cette enquête.

L'enquête sur la main-d'œuvre hautement qualifiée a été menée pour le compte du ministre d'État aux Sciences et de la Technologie. Basée sur un échantillon de diplômés universitaires identifiés par le recensement de 1971, l'enquête doit servir à recueillir des renseignements supplémentaires sur ces diplômés. Une enquête-pilote menée en septembre 1972 comprenait un échantillon de 4,000 personnes tirées de l'enquête sur la population active de février 1970 et 4,000 autres, du recensement de 1971. Le premier échantillon servait à mesurer le taux prévu de non-réponse, parce que l'intervalle entre l'enquête sur la population active et l'enquête-pilote était à peu près le même que l'intervalle prévu entre le recensement et l'enquête sur la main-d'œuvre hautement qualifiée. L'échantillon du recensement devait être utilisé pour éprouver les méthodes de rappel. Le projet-pilote est presque achevé. Les données sont enregistrées sur bande et passent maintenant l'étape de la vérification et de la correction. On produira des totalisations pour mettre à l'essai tout le système informatique et s'assurer qu'il sera prêt pour l'enquête principale en septembre 1973. Le travail avance bien et un échantillon des fichiers a été tiré des bandes du recensement. Les noms et les adresses des personnes choisies sont en préparation pour les étiquettes postales imprimées par ordinateur. On a terminé la conception du questionnaire et la rédaction finale des procédés à suivre dans les bureaux régionaux.

Mis à part les tableaux de base pour le ministre d'État, on intégrera au système un moyen d'extraire sur demande des totalisations à des fins de recherche.

L'enquête concernant la Loi sur la réforme du cautionnement a été entreprise pour le compte du ministère de la Justice pour recueillir des données sur l'influence de la nouvelle loi promulguée en janvier 1972. Bien qu'on ait recueilli des statistiques sur les tribunaux, les questions concernant le cautionnement ne pouvaient être incorporées dans les procédés normaux et prétendre encore répondre aux demandes dans les délais. On a proposé de mener une enquête-pilote et une enquête-échantillon qui jetteraient les bases d'une enquête à grande échelle, en 1973. Le travail sur le terrain pour l'enquête-pilote visant les 30 tribunaux a été effectué en septembre. Le dépouillement s'est échelonné de novembre à mars et les premières totalisations ont été présentées au ministère de la Justice au mois de février. On s'attend à ce

que les totalisations finales soient produites vers la fin de mars.

Services de traitement des données

Il existe cinq grands projets continus de traitement sur clavier qui sont éprouvés par échantillon à l'aide d'un ou plusieurs projets de contrôle qualitatif. Trois d'entre eux concernent la vérification sur clavier, un autre la perforation sur clavier et le dernier qui est une combinaison des deux. De plus, on a élaboré et utilisé des projets de contrôle qualitatif pour la saisie des données des recensements de la population et de l'agriculture, en 1971. La majorité des enquêtes actuelles utilisent la méthode de vérification sur clavier; on étudie actuellement la possibilité de convertir à la vérification sur clavier les autres enquêtes qui emploient la perforation sur clavier.

Les opérateurs de perforatrices sur clavier ont reçu une formation, des documents d'essai et des exposés lors de chaque enquête, à cause de la nature particulière de chacune de ces enquêtes. Des programmes d'ordinateurs ont été rédigés et sont utilisés par l'intermédiaire de terminaux pour conserver un projet efficace de contrôle qualitatif. Un nouveau projet de contrôle qualitatif a débuté cette année pour l'enquête sur la main-d'œuvre; un autre a été établi pour déterminer la possibilité (du point de vue de la production et de la qualité des données saisies) d'utiliser la méthode de reconnaissance optique des caractères (ROC) pour saisir les données d'enquête directement des documents pouvant être lus par la machine.

Élaboration d'enquêtes "ménages"

Cette division s'occupe généralement de fournir des données méthodologiques en vue de la conception et la tenue d'enquêtes-échantillon de ménages; son travail porte sur les sujets que voici: enquête sur la population active, tourisme et voyages, recherche méthodologique, consultation et enquêtes spéciales.

Enquête sur la population active

a) Mesures de permanence et de qualité:

La Section du contrôle de l'échantillon et les méthodologistes d'enquête de l'élaboration d'enquêtes "ménages" sont concernés par les opérations quotidiennes de l'enquête sur la population active: préparation du matériel d'échantillonnage, renouvellement des unités d'échantillonnage, modification des limites et réponses à divers problèmes tels que ceux que posent la croissance démographique. Les taux de non-réponse sont calculés et évalués tous les mois, puis sont ensuite ventilés selon la région et le type de non-réponse. Parmi les autres mesures qualitatives produites chaque mois, mentionnons les taux de rotation des enquêteurs, les taux de non-homogénéité (taux de l'écart entre les estimations dépassées de l'échantillon et les estimations démographiques prévues lors du recensement), les frais de dénombrement et de déplacement par ménage et les taux d'erreurs des documents. Les autres études comprennent l'analyse de la variance-covariance

selon lesquelles sont calculées les variances pour 40 caractéristiques recueillies dans l'enquête sur la population active, de même que la variance des différences et des moyennes trimestrielles ou annuelles. Cette analyse sert également à contrôler le rendement des échantillons.

b) Nouveau plan de l'échantillon:

La révision de l'enquête sur la population active, qui sera terminée au milieu de l'année 1974, se fonde sur le recensement de 1971. Le questionnaire est également entièrement révisé. Il sera nécessaire d'effectuer un essai parallèle de l'enquête et du questionnaire pendant au moins un an. On a aussi mis sur pied un groupe d'évaluation et de révision des nouveaux changements méthodologiques, afin de coordonner et d'évaluer les modifications proposées par l'intermédiaire d'études pilotes avec d'autres groupes et aussi pour effectuer des recherches méthodologiques.

La Division de l'élaboration d'enquêtes "ménages" s'occupe également de recherches méthodologiques sur la population active par le moyen d'un échantillon de ménages observés tous les mois en vue de définir, par exemple:

- l'utilisation des différents styles des questionnaires, et
- l'influence du fardeau que représente la réponse pour le répondant (questionnaires longs) sur le taux des refus.

La nouvelle enquête apportera certaines améliorations dans les méthodes et les opérations qui viseront à réduire l'effet de la croissance démographique sur la variance d'échantillonnage sans qu'on ait à procéder à une révision importante. L'efficacité de la méthode de la stratification sera augmentée grâce aux nouvelles méthodes d'automatisation.

Deux méthodes servant à établir le poids des données d'enquête supplémentaires ont été proposées et sont évaluées à l'heure actuelle. On s'attend à ce que soit mis sur pied un programme général de pondération pour les diverses enquêtes reliées à l'enquête sur la population active, afin d'améliorer les délais d'exploitation.

Voyages et tourisme

a) Enquête sur les voyages des Canadiens, 1971:

Parrainée par l'Office de tourisme du gouvernement canadien, cette enquête visait à mesurer le volume et la valeur des voyages effectués par les Canadiens en 1971. Environ 13,000 ménages ont été interrogés en quatre occasions différentes au cours de l'année. Les totalisations de base ont été produites en 1972 et un rapport a été présenté à la Conférence fédérale-provinciale sur les voyages et le tourisme. Sont également en préparation des bulletins traitant de la méthodologie et d'une analyse plus poussée des données, d'une évaluation des divers aspects de la collecte des données et de leur dépouillement.

b) Statistiques sur les voyages internationaux

Un programme à long terme visant à répondre aux besoins croissants des utilisateurs a été mis sur pied pour fournir un système de rechange pour la collecte des données sur les voyages internationaux, tout en gardant en vue

le double objectif qui est d'accroître l'efficacité et l'étendue des données. De nouvelles méthodes d'échantillonnage du trafic automobile entrant au Canada sont également à l'étude: on pense introduire une structure d'échantillonnage permanente aux principaux ports d'entrée des automobiles. On procède également à une étude et à une évaluation des méthodes utilisées dans les autres enquêtes sur les voyages internationaux.

Consultation et enquêtes spéciales

La Division de l'élaboration d'enquêtes "ménages" fournit un service consultatif à Statistique Canada et à d'autres ministères du gouvernement.

Les services fournis contre remboursement comprennent:

- Vaste programme de consultation méthodologique
- Établissement de la taille de l'échantillon et du procédé d'estimation
- Stratification et choix de l'échantillon
- Établissement des formules de contrôle pour le travail sur le terrain
- Procédé d'imputation et de pondération
- Évaluation des résultats
- Aide à la gestion des enquêtes et
- Fonction de directeurs de projets.

Autres

La Division de l'élaboration d'enquêtes "ménages" a mis sur pied et présenté un cours élémentaire sur la théorie de l'échantillonnage destiné aux statisticiens subalternes; elle a également offert un cours avancé.

Les bulletins trimestriels sur le travail méthodologique concernant les Services statistiques dont l'élaboration d'enquêtes "ménages" fait partie à titre de division, sont diffusés partout à travers le monde.

Services d'information

Ce groupe de services est chargé des programmes visant à améliorer la diffusion et l'utilisation du produit de Statistique Canada, les taux de réponse et l'image de Statistique Canada au sein du grand public.

- Division de l'information
- Bibliothèque
- Division de l'Annuaire du Canada

Division de l'information

La Division de l'information a continué de faire connaître Statistique Canada par ses publications, ses communiqués et ses présentations. Un objectif essentiel était de rehausser l'image de Statistique Canada en vue d'améliorer le taux des réponses.

Les présentations à l'intention d'auditoires particuliers se sont affirmées comme une part importante des activités de la division. Ces présentations ont d'abord été utilisées dans 11 réunions annuelles agricoles. Le programme a pris de l'ampleur avec d'autres présentations plus élaborées conçues pour les associations alliées de sciences sociales.

Ces présentations, préparées en collaboration avec le Conseil économique du Canada, Information Canada et l'Office de tourisme du gouvernement canadien, ont été utilisées ultérieurement à d'autres conférences auxquelles Statistique Canada a participé.

Au nombre des nouvelles publications produites en 1972-1973 figure SCAN, journal pour les employés de Statistique Canada.

Des modifications ont été apportées aux bulletins quotidien et hebdomadaire de Statistique Canada et des communiqués ont été préparés. Ces modifications avaient pour but de publier séparément le bulletin hebdomadaire et

le quotidien et de créer une Sous-section de la production et de la planification de la publication.

La division a conçu des programmes documentaires à l'intention des répondants; elle a participé à de nombreux programmes de consultation postale, d'envois directs par la poste et rédigé des lettres demandant la collaboration à nombre d'enquêtes.

On a également beaucoup aidé les journalistes qui rédigeaient des articles, surtout ceux qui ont eu besoin de données du recensement.

La Section de dessin de la division a élargi ses cadres, afin de pouvoir répondre à la demande croissante de graphiques et de tableaux.

Bibliothèque

La bibliothèque de Statistique Canada est essentiellement un instrument de recherche économique et statistique à l'usage du personnel et des spécialistes de Statistique Canada et des autres bibliothèques gouvernementales et universitaires. Elle contient un vaste fonds de monographies, de périodiques, de documents et de rapports ainsi qu'une importante collection de publications statistiques canadiennes et étrangères.

En 1972-1973, la bibliothèque a mis en pratique un grand nombre des recommanda-

tions d'une étude qu'elle avait entreprise en 1971 en collaboration avec la Bibliothèque nationale. Les procédures d'acquisition de matériel de bibliothèque ont été révisées et améliorées. Il y a eu une plus forte demande de services de référence, dont la qualité a été améliorée.

Un nouveau catalogue de l'ensemble des ressources de bibliothèque de Statistique Canada est en cours de compilation.

Les objectifs de la bibliothèque de Statistique Canada ont été approuvés et les plans préliminaires de la nouvelle bibliothèque qui sera située dans la tour de Statistique Canada sont prêts.

Division de l'Annuaire du Canada

Le programme de cette division touche la planification, la compilation et la rédaction, ainsi que la publication en français et en anglais de l'Annuaire du Canada et de Canada.

L'Annuaire du Canada est un ouvrage officiel de référence embrassant tous les aspects de la vie sociale, économique et politique du Canada. L'édition de 1972 a paru en décembre. Canada 1973 a été publié au printemps de 1973 et tiré à 200,000 exemplaires, dont 43,000 ont été distribués à l'étranger par le ministère de l'Industrie et du Commerce et le ministère des

Affaires extérieures. Le reste a été vendu au Canada ou distribué par d'autres ministères gouvernementaux.

Une sous-section des renseignements spéciaux s'est occupée de fournir des statistiques, à partir de l'Annuaire du Canada et d'autres sources faisant autorité à Statistique Canada, à diverses publications des Nations Unies et aussi au Bureau international du Travail. Elle fournit également des textes de révision et des analyses statistiques destinés à un grand nombre d'ouvrages de référence et répond à des demandes de données courantes et chronologiques suite à des questions portant sur plusieurs sujets.

Direction de l'administration

La direction s'occupe des services et du soutien internes à Statistique Canada.

- Services financiers et administratifs
- Division de la planification et de l'ordonnancement de la production
- Administration du personnel
- Division du traitement des données

Services financiers et administratifs

Les Services financiers et administratifs comprennent les services de production, les services financiers, le PRACAS (système de comptabilité analytique et de surveillance de la gestion), la gestion des dossiers et des locaux.

Les deux fonctions principales des Services financiers relèvent de deux sous-sections, soit les comptes financiers et la distribution des publications.

La Sous-section des finances s'occupe de toutes les opérations financières, ce qui comprend la préparation des prévisions budgétaires principales et le maintien d'un système de renseignements financiers. Elle examine et contrôle les dépenses, vérifie les réclamations des comptes commerciaux, donne l'interprétation des règlements financiers et agit à titre de conseiller pour les services d'exécution. Les activités du fonds renouvelable sont passées de 90 à 170 postes de 1971-1972 à 1972-1973 pour s'établir à \$1,394,000.

La Sous-section des publications a pour tâche de distribuer toutes les publications de Statistique Canada et de faire parvenir les bulletins statistiques aux abonnés. Au cours de l'année, 3,200,000 envois postaux relatifs aux publications ont été effectués, tandis que 93,500 commandes postales nous parvenaient.

La liste d'envoi postal comprenait 270,000 plaques d'adressographe, 18,500 publications ont été remises en mains propres.

PRACAS

Statistique Canada a réalisé d'importantes économies de temps et de ressources en mettant sur pied de nouvelles méthodes de collecte et un système de lecture optique des données d'entrée. Des programmes supplémentaires ont fourni une analyse de l'utilisation d'années-hommes et des ressources par type de projet et structure d'activité, ce qui a permis d'effectuer une revue courante des réalisations au regard des objectifs prévus.

Gestion des dossiers

L'activité de la Section de la gestion des dossiers s'est intensifiée au sein d'un nombre croissant de divisions à Statistique Canada. On a terminé l'installation d'un système type de classification des dossiers dans les bureaux régionaux qui s'harmonisent avec celui de la Division des opérations régionales. De plus, on a enlevé les dossiers confidentiels semi-actifs des anciennes étagères fixes pour les insérer dans un classeur mobile de type nouveau. En collaboration avec les experts-conseils en gestion, la section a étudié les besoins en matériel et en

installations d'entreposage dans la nouvelle tour et dans l'immeuble principal rénové.

Service des locaux

Le Service des locaux a administré environ 700,000 pieds carrés de locaux et d'espace d'entreposage. Les déménagements de bureaux se sont maintenus à un rythme minimum en attendant que la nouvelle tour de 26 étages soit terminée (la date d'occupation est prévue pour la fin de 1973). L'expansion et la modernisation de la cafétéria, dont la capacité sera presque doublée, seront achevées au cours de 1973. Les services de télécommunications fournis au personnel ont augmenté de 15 %, faisant passer le nombre d'appareils téléphoniques à près de 2,000.

Services de production

Cette section a continué de fournir à tout Statistique Canada des services dans les domaines de l'achat et de la gestion de la papeterie, de la polycopie, de l'impression, de la gestion des formules, de l'adressographie, des envois postaux, de la dactylographie et de la transcription. Le service des achats et de la gestion des documents a traité 5,253 commandes totalisant \$2,900,000. La gestion des formules a aidé à préparer et à concevoir le système de lecture

optique des documents en vue du recensement d'essai de 1974. Elle a également fourni son aide pour établir la présentation des documents dans l'enquête sur la statistique de l'état civil, afin que sa normalisation soit acceptée au niveau provincial, et pour la mise en application des descriptions basées sur le système métrique. La Sous-section de l'adressographe et du courrier a manutentionné 36,699 sacs de courrier et adressé 16,900,000 formules. Outre les 136,532 pages de documents dactylographiés, la Sous-section de la dactylographie et de la transcription s'est également chargée de dactylographier les données de sortie du système de lecture optique et de la composition automatique des publications. Plus de 11,000 pages de copie ayant trait à 2,000 publications différentes ont été produites par la Sous-section de la production, de l'ordonnancement et de la liaison et envoyées à l'impression. Le nombre total de messages transcrits et envoyés ou reçus par télétype se sont élevés dans chaque cas à 27,278.

Division de la planification et de l'ordonnancement de la production

La Division de la planification et de l'ordonnancement de la production a été créée en mars 1972, à la suite d'une étude qui a confirmé le besoin d'un centre de gestion de la production et la possibilité d'en assurer la maintenance.

La division comprend trois sections: planification de la production, planification et ordonnancement des services, et développement.

Les travaux ont progressé au cours de l'année en ce qui concerne la mise en place d'un système d'ordonnancement et de planification de la production; un projet préliminaire couvrant les publications et les formules a été préparé et distribué. Après étude et révision par les divisions spécialisées, la publication se fera à intervalles réguliers.

Une étape est franchie: la préparation, l'impression et la traduction des textes, le traitement au varitype, l'indication des adresses et la distribution ont été l'objet de procédures définies; la division poursuit la préparation d'un manuel de travail sur les délais et les définitions des ressources. Le flux de production de certaines publications de divisions spécialisées a été contrôlé par l'intermédiaire d'un système conceptuel d'ordonnancement. Ce système est appelé à fournir la base du système général d'ordonnancement.

Administration du personnel

Au total, 658 employés permanents ont été embauchés pendant l'année. De ce nombre, 131 étaient des statisticiens ou des économistes. De plus, on a procédé à l'embauche de 788 employés temporaires. Au cours de la même période, 1,509 employés ont quitté le service, dont 450 permanents et 1,059 occasionnels ou temporaires.

À la fin de l'année, la section comptait 3,761 employés permanents et 1,167 employés temporaires ou occasionnels.

Au cours de l'été, 238 étudiants ont été

embauchés dont 46 comme adjoints diplômés à la recherche et le reste comme employés de bureau. La Section de la dotation en personnel a organisé 250 concours restreints et 29 concours interministériels; 46 candidats ont été choisis à partir d'autres sources, par exemple le Permatri et les dossiers du personnel. Dans les bureaux régionaux, on a tenu 12 concours restreints et 11 employés ont reçu une promotion par la suite. De plus, 759 employés ont été promus par d'autres méthodes, ce qui a donné un total de 1,339 promotions. Vingt-sept concours publics ont également été tenus, dont quatre au bureau central et 23 dans les bureaux régionaux. Au nombre des 17 appels interjetés, 16 avaient trait à des concours restreints et un portait sur une recommandation pour une promotion accordée sans concours. On a fait droit à six appels et les appelants en ont retiré trois.

Section de la classification

Afin de marcher de pair avec la nouvelle réorganisation de Statistique Canada, la Section de la classification a reçu pour tâche de prendre des décisions de classification concernant les sous-sections de personnel déléguées sur le terrain. Lorsqu'un secteur ne bénéficie pas d'un personnel de classification, la Section de la classification centrale lui désigne un agent.

Afin d'assurer un rendement qualitatif et de répondre aux exigences du Conseil du Trésor, la section a mis sur pied une sous-section s'occupant de vérifier les classifications, de donner la formation aux employés et de s'occuper des griefs. On a offert trois cours théoriques et pratiques sur l'évaluation des tâches et l'on s'attend à ce que ces cours soient encore dispensés au cours de la prochaine année financière.

On a procédé à l'évaluation de 2,340 postes permanents de durée déterminée au cours de l'année financière 1972-1973.

Formation et perfectionnement du personnel

Au cours de 1972-1973, 1,640 employés de Statistique Canada ont suivi une formation ou une activité visant leur perfectionnement.

Des cours sur les principes et techniques modernes de gestion ont été donnés aux surveillants d'exécution du premier niveau, ainsi qu'aux cadres intermédiaires. On a également offert des cours de direction d'équipes de projets visant à permettre aux participants d'étudier les principes du travail en équipe nécessaires pour mener à bien les grandes enquêtes statistiques dans les délais prévus, tout en tenant compte des crédits prévus. Des cours sur la planification de la retraite ont été donnés aux employés de long service. Des cours d'initiation ont été offerts de façon régulière, afin de faire mieux connaître aux nouveaux employés leurs conditions d'emploi.

On a également offert un cours d'"instructeur efficace" portant sur l'utilisation des aides audio-visuelles.

Les bandes magnétoscopiques produites en classe et en studio ont été largement utilisées dans plus de 30 programmes enregistrés au cours de cette période. Le centre a également

donné divers cours sur les ordinateurs et le traitement des données en se servant de bandes magnétoscopiques.

Le programme de formation sur le traitement des données a pris de l'ampleur et s'oriente maintenant vers deux groupes distincts. Ce sont:

Le directeur — pour aider à comprendre l'utilisation des ordinateurs, approuver les communications entre l'utilisateur et l'analyste des systèmes, montrer comment l'automatisation change les tâches et enseigner des langages généralisés aux utilisateurs.

Le spécialiste du traitement des données — pour former de nouveaux agents et recycler le personnel spécialisé dans un secteur en constante évolution.

Pour la première fois, tous les cours concernant le perfectionnement en travail de bureau et en technique ont été offerts dans les deux langues officielles du Canada; 16.6 % ont été donnés en français à la demande des participants.

Des cours visant au perfectionnement professionnel ont été offerts en économétrie et en théorie avancée de l'échantillonnage statistique. On a également donné des cours d'orientation pour les nouveaux employés spécialisés. Six employés étaient absents en congé d'études et cinq employés de pays en voie de développement ont reçu une formation à Statistique Canada sous les auspices de l'Agence canadienne de développement international. Un bulletin sur la formation a également été publié pendant l'année.

Au cours de 1972-1973, la Division du recensement a orienté sa formation vers le développement des carrières des particuliers, des spécialistes et des surveillants, l'évaluation du programme de formation de 1972 et la recherche concernant les techniques de formation pour le recensement d'essai de 1974 et le recensement de 1976.

Section de l'utilisation et de la planification de la main-d'œuvre

Cette section a fourni des renseignements analytiques sur les ressources en main-d'œuvre disponibles et sur les prévisions en besoins de main-d'œuvre dans son rapport annuel et par des études spécialisées.

Un travail considérable a été entrepris sur un système de dénombrement du personnel de Statistique Canada. Des formules d'évaluation ont été établies et appliquées pour les catégories de personnel de soutien administratif et des opérations, ainsi que pour les fonctionnaires supérieurs de Statistique Canada. Les efforts que nous avons déployés pour augmenter la participation au programme actuel d'évaluation des employés et au système d'inventaire du Permatri ont donné des résultats relativement satisfaisants.

On a introduit un programme visant à assurer aux femmes de Statistique Canada des occasions d'emploi et de perfectionnement égales aux employés de sexe masculin. Le comité de l'égalité d'avancement pour la femme enquête sur les secteurs-problèmes et rédige des

recommandations. La planification et le contrôle de l'utilisation d'années-hommes au cours de l'année ont eu des résultats assez intéressants: 98,9 % des 4,883 années-hommes prévues pour Statistique Canada ont été utilisés.

Relations du personnel

Au cours de l'année, le personnel a poursuivi son rôle de conseiller pour l'administration concernant les 16 négociations collectives de Statistique Canada et les plaintes et griefs qui en ont découlé.

Au total, les employés de Statistique Canada ont présenté 15 propositions; sur ce nombre, quatre ont été approuvées, quatre ont été rejetées et le reste est encore à l'étude. Les primes en espèces ont totalisé un montant de \$806,24 en 1972-1973. Trois propositions présentées au cours de l'année financière précédente ont valu à leurs auteurs des primes totalisant \$407,28.

Le statisticien en chef du Canada a présenté 25 certificats de long service (25 ans) et des broches à 47 employés de Statistique Canada.

Division du traitement des données

Cette division fournit le matériel et les techniques de traitement des données rassemblées par les divisions spécialisées. Pour les travaux de moindre importance, lorsqu'il ne faut qu'un minimum de recoupements, on utilise des calculatrices de bureau pour obtenir des agrégats, des ratios et des moyennes. Pour les classifications et les manipulations plus complexes, on se sert d'un ordinateur de grande puissance muni de périphériques et de matériel de soutien. En ce qui a trait aux programmes de soutien, la division a mis au point un système de comptabilité et de gestion qui remplace le système qu'elle louait; elle a également acheté un assortiment de programmes, ce qui facilite l'accès à l'ordinateur à l'aide des terminaux qui y sont reliés.

L'ordinateur de la division est un IBM S/370-165 d'une capacité de stockage de 1,536,000 octets dont les périphériques comportent un réseau de terminaux internes à la disposition d'un grand nombre d'utilisateurs. Acquis au milieu de l'année, cet ordinateur remplace l'ancien dont la puissance, nettement insuffisante, avait obligé la division à faire appel à des services commerciaux et à d'autres services d'informatique gouvernementaux.

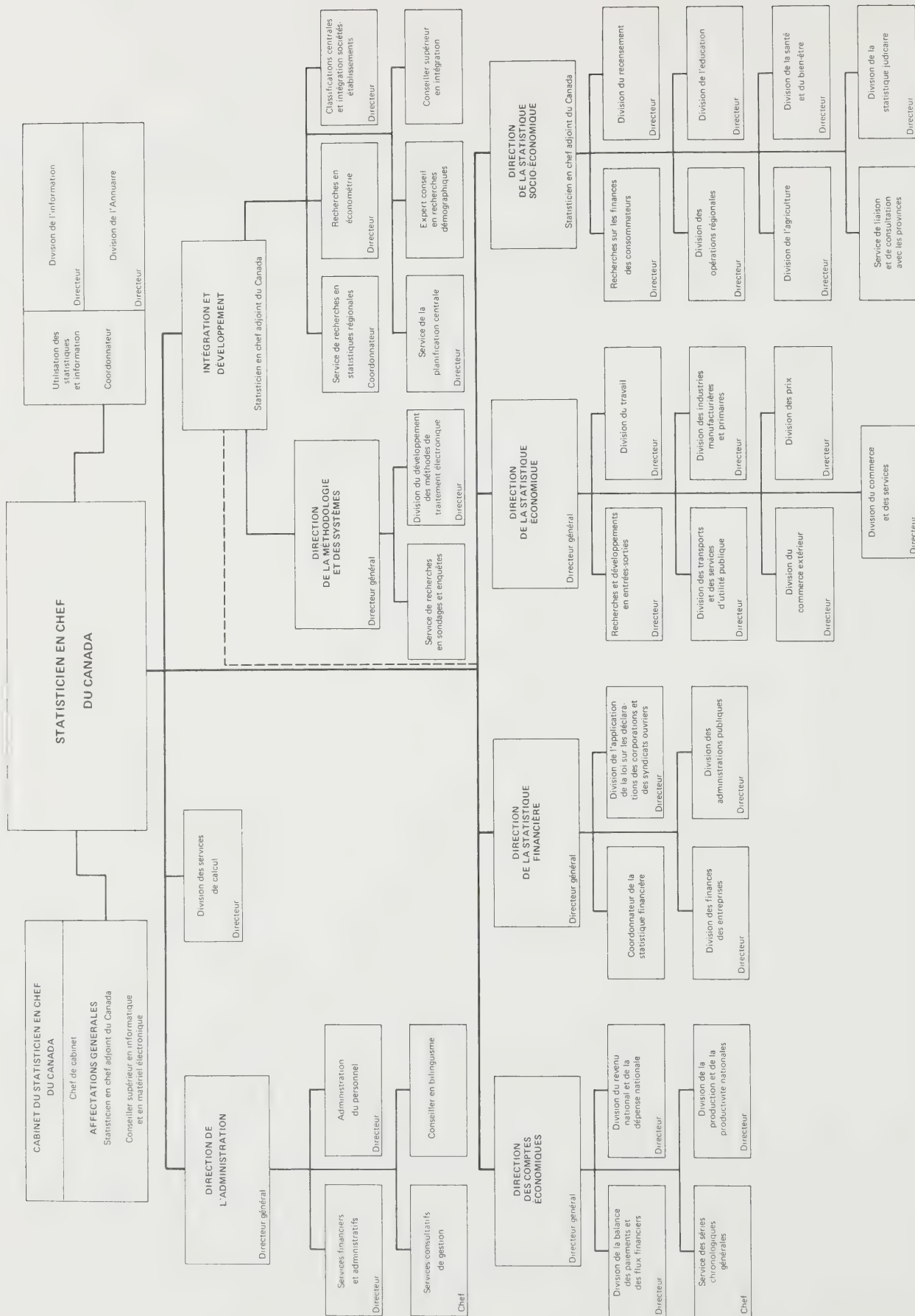
Le centre de calcul fonctionne cinq jours par semaine, vingt-quatre heures par jour et par postes réguliers de huit heures le samedi et le dimanche.

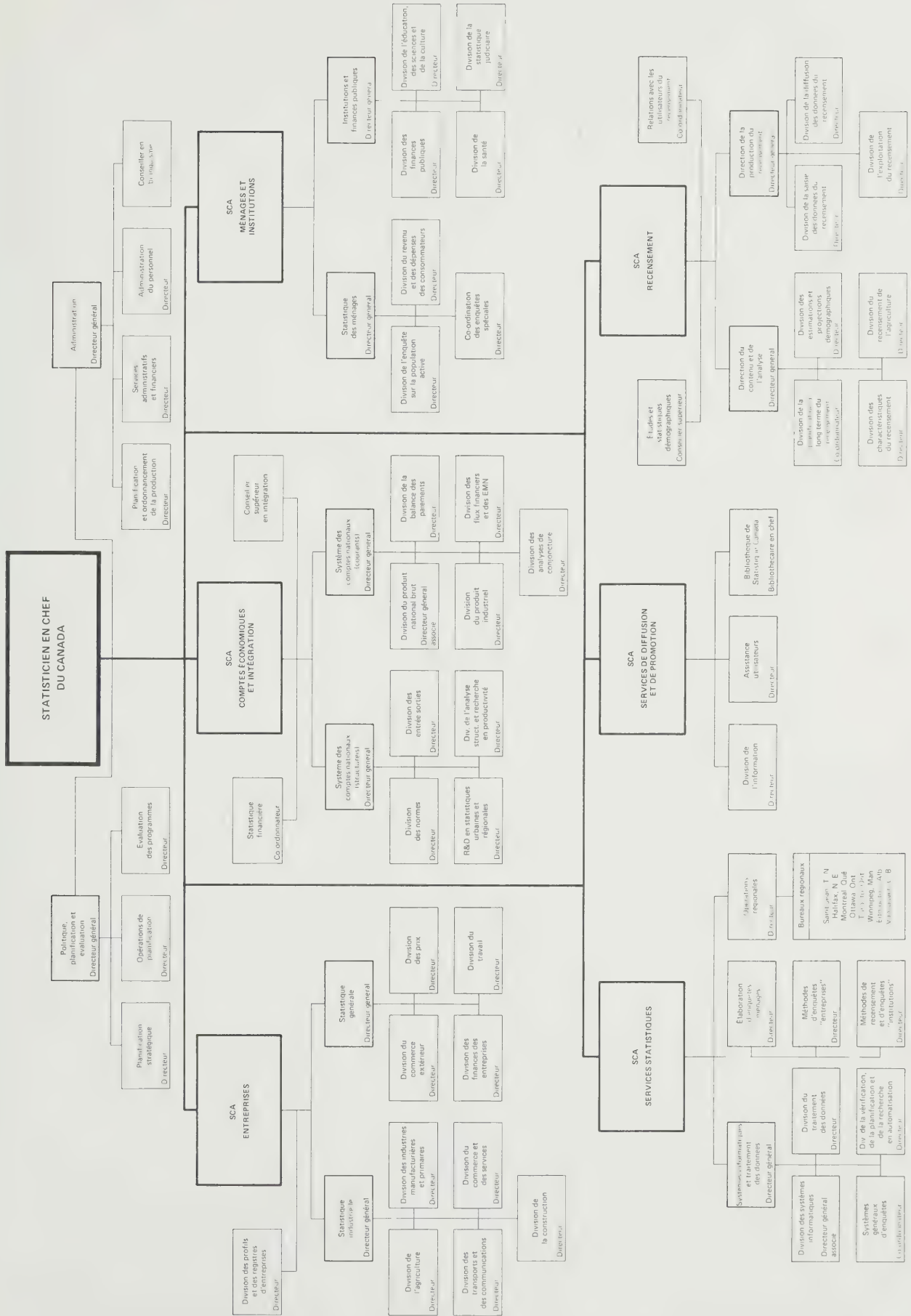
La conversion des données se fait par perforation, par lecture optique et par enregistrement direct sur disque, ce qui est particulièrement utile dans le cas des fiches comportant plus de 80 caractères et dans celui des travaux d'importance. Le contrôle qualitatif s'effectue par la vérification d'échantillons de données d'entrée. Les responsables des enquêtes et de l'entrée des données peuvent analyser les renseignements mis à leur disposition pour assurer un contrôle efficace de la qualité.

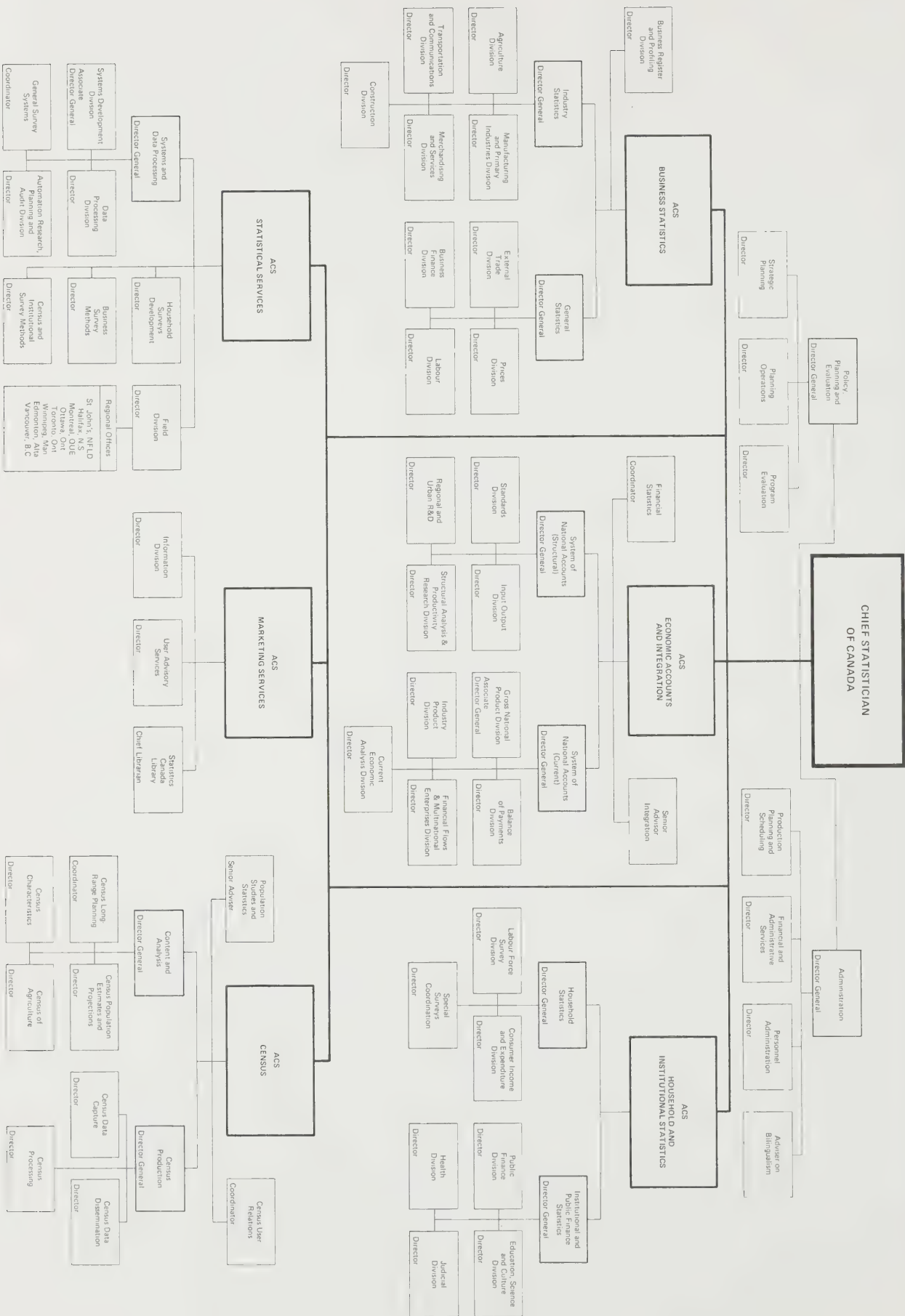
Les études de praticabilité qui ont débuté ont porté sur l'utilisation de la reconnaissance optique des caractères (R.O.C.) pour le rassemblement des données d'enquêtes sous une forme lisible par machine.

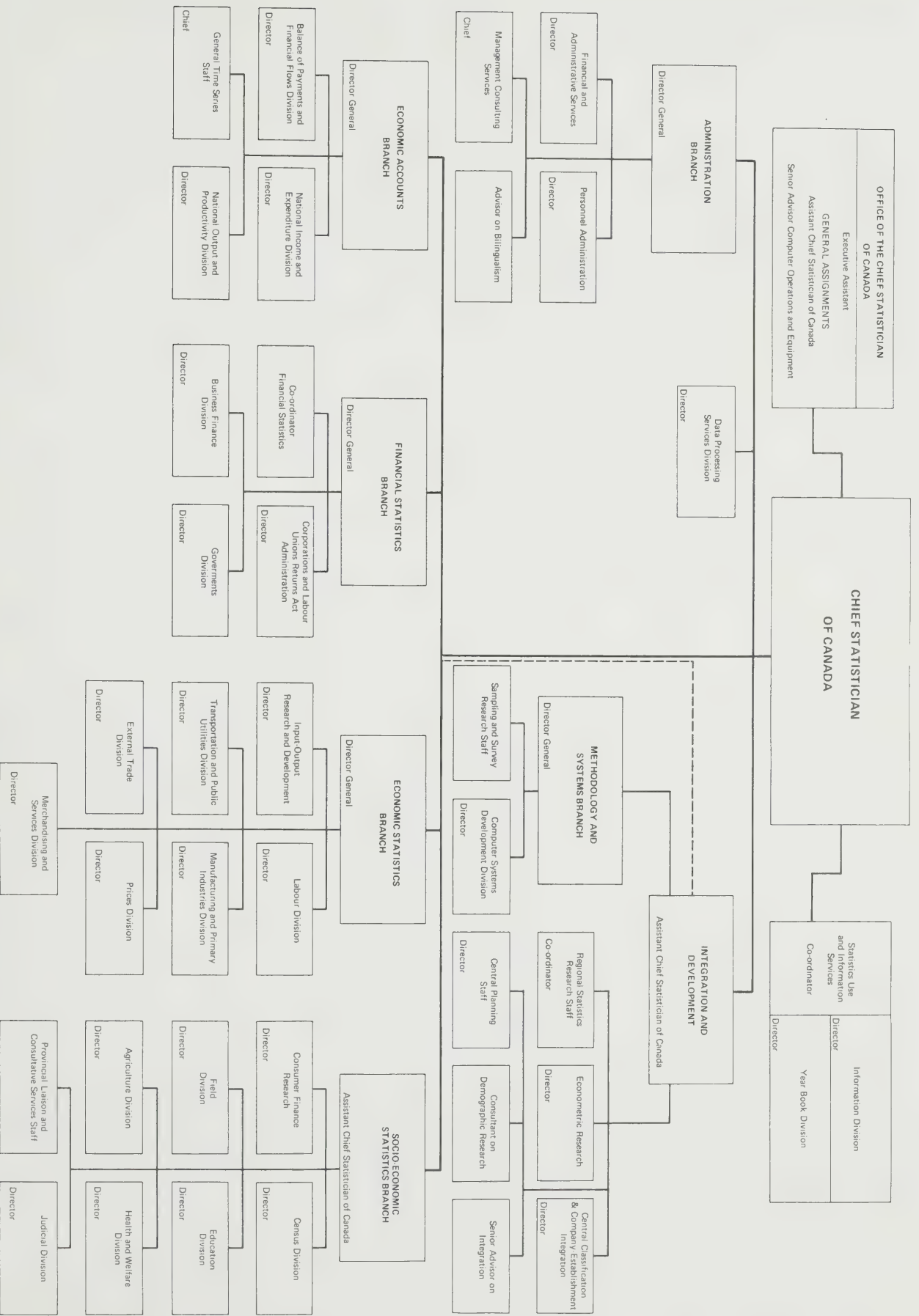
L'exploitation des résultats du recensement de 1971 s'est révélée un travail important en 1972-1973; de fait, elle est intervenue pour la plupart des demandes de données informatiques en ce domaine. La saisie des données par lecture optique a été terminée, de même que la vérification et la totalisation par ordinateur du comptage total. On a beaucoup modifié les programmes de contrôle des renseignements d'échantillonnage et la vérification finale a démarré. Le fichier contrôlé des données sur l'agriculture a été totalisé.

À la demande de l'Agence canadienne de développement international, le directeur de la division a fourni également au gouvernement du Kenya des conseils sur le traitement des données.









ment service bureaux to meet demands. The computer centre is operating on a five-day, 24-hour basis with regular eight-hour shifts on Saturday and Sunday.

Data conversion is done by key-punch equipment, by optical mask readers and key-to-disk systems, which are particularly useful for records longer than 80 characters and for large-volume projects. Quality control is accomplished through verification of controlled samples of the input. Information for analysis by survey and data entry is available to provide effective quality control.

Feasibility studies have started in using optical character recognition (OCR) equipment to capture survey data in machine-readable form.

Data processing of 1971 Census results was a major 1972-73 project and accounted for much of the computer demands: data capture with optical scanning equipment was finished; computer editing and tabulating of the total count was completed; edit programs of sample information were substantially modified and the final edit started; and the edited file of agricultural data was tabulated.

The division's director provided data processing advice to the Kenya government at the request of the Canadian International Development Agency.

printing. Telex messages transcribed totalled 27,278 and an equal number were received.

Production Planning and Scheduling Division

The Production Planning and Scheduling Division was set up in March, 1972, as a result of a feasibility study which confirmed the need for, and viability of, a Statistics Canada production management function.

The division is subdivided into three sections: production planning, service planning and scheduling and development.

Progress towards implementing a production planning and scheduling system continued throughout the year with a preliminary plan covering publications and forms prepared and distributed. Following review and revision by subject-matter divisions, it will be issued on a regular basis.

The analysis of copy preparation, printing, translation, variety, addressograph and distribution functions was completed and a working manual prepared on flow times and definitions of resources. The production flow of certain subject-matter division publications was monitored against a conceptual scheduling system. This system is to provide the basis of the over all scheduling system.

Personnel Administration

A total of 658 continuing employees were hired during the year, of whom 131 were statisticians or economists. In addition, 788 term employees were hired. During the same period, 1,509 employees left, including 450 continuous and 1,059 casual and term employees.

There were 3,761 continuing employees on staff at the end of the year and 1,167 term and casual employees.

During the summer, 238 students were employed — 46 as graduate research assistants and the balance in a clerical capacity. The staffing section conducted 250 closed and 29 inter-departmental competitions and 46 selection and inventory searches. In the regional offices, 12 closed competitions were held with 11 employees promoted as a result. In addition, 759 employees were promoted by other promotions making a total of 1,339 promotions. There were also 27 open competitions — four at head office and 23 in the regional offices. There were 17 appeals with 16 registered in closed competitions and one against recommendations for promotion without competition. Of these, six were allowed and three were withdrawn by individuals.

Classification Section

To keep pace with the new Statistics Canada reorganization, the classification section is given responsibility for making classification decisions to delegated field personnel units. Where a field does not have a classification staff, the

central classification section has designated an officer.

To ensure quality performance and compliance with Treasury Board requirements, the section has set up a classification audit, training and grievance unit. Three theory-practice job evaluation courses were held and it is expected these will be continued throughout the next fiscal year.

A total of 2,340 continuing term positions were evaluated during the fiscal year 1972-73.

During 1972-73, 1,640 employees of Statistics Canada attended a training or self-development activity.

Staff Development and Training

Courses in modern principles and techniques of management were conducted for first-line supervisors and middle managers. Project team management courses were also conducted to enable participants to study the principles of teamwork necessary to complete major statistical surveys on time and within budget. Retirement planning seminars were conducted for long-service employees and induction courses were conducted regularly to acquaint new employees with the terms and conditions of employment.

An "effective trainer" course, which outlined the use of audio-visual aids, was offered. Videotapes produced both in classroom and in studios were used extensively with more than 30 programs taped during the period. The media centre also administered a variety of computer and data-processing courses using the data-processing training program continues to expand and now is directed toward two distinct groups. These are:

The Manager — to aid in understanding the use of computers, to approve communication between the user and the systems analyst, to show how job may change with automation and to teach the user generalized languages.

The Data Processing Professional — to train new officers and to upgrade the professional staff in an ever-changing field.

For the first time, all clerical and technical development courses were offered in both official languages with 16.6 per cent being in French at the participant's request.

Professional development courses were conducted in econometrics and advanced theory of statistical sampling. Orientation courses were conducted for new professional leave and five employees were on educational leave and five employees from developing countries received training at Statistics Canada under the auspices of the Canadian International Development Agency. A training newsletter was also started during the year.

During 1972-73, Census Division training activity was oriented to individual, professional and supervisory career development, evaluation of the 1972 Census training program and research into training techniques for both the

1974 trial census and the 1976 Census.

Manpower Planning and Utilization Section

The manpower planning and utilization section provides analytical information on current manpower resources and forecasts of manpower requirements through its annual review and specialized studies.

Considerable work on a personnel enumeration system for the department was carried out. Appraisal forms were developed and implemented for the administrative support and operational categories and for the department's senior officers. Efforts to increase participation in the existing employee appraisal program and in the data stream inventory system were relatively successful.

A program to ensure equal employment and development opportunities for women in the department was initiated. The committee on equal opportunities for women is investigating problem areas and drawing up recommendations. The man-year utilization, planning and monitoring activities performed during the year were quite successful — 98.9 per cent of the 4,883 man-years allocated to the department were utilized.

Staff Relations

During the year, the staff continued its advisory role to the administration on the bureau's 16 grievances that arise.

A total of 15 suggestions were submitted by Statistics Canada employees — four approved, four rejected and the balance still under review. The total cash award for 1972-73 was \$806.24. Three suggestions from the previous fiscal year received cash awards totalling \$407.68.

The Chief Statistician of Canada presented 25-year long service award certificates and pins to 47 employees of Statistics Canada.

Data Processing Division

This division provides a variety of equipment and techniques for processing data gathered by subject-matter divisions. For small projects, where a minimum of cross-classification is required, desk calculators are used to obtain aggregates, ratios and averages. For more complex classifications and manipulations, a large-scale computer with associated peripheral and support equipment is used. In software support, the division has developed an accounting and management system to replace a leased system and has acquired software packages, facilitating access to the computer system through associated terminals.

The division's computer is an IBM S/370-165 with a core capacity of 1,536,000 bytes and associated peripherals including an in-house terminal network to service a large group of computer users. It was acquired at mid-year, replacing a computer which had forced extensive use of commercial and other govern-

Administration branch

The branch is responsible for internal support and service activities of the bureau.

- Financial and Administrative Services
- Production Planning and Scheduling Division
- Personnel Administration
- Data Processing Division

Financial and Administrative Services

Financial and Administrative Services consists of Production Services, Financial Services, Management and Progress Reporting and Cost Accounting System (PRACAS). Recording Management and Accommodation Services.

The two main functions of Financial Services are performed by its Financial Accounts Unit and Publications Distribution Unit.

The financial unit is responsible for over-all financial operations including preparation of main estimates and maintenance of a financial information system. It examines and controls expenditures, audits claims in commercial accounts, interprets financial regulations and serves as advisor to line managers. Revolving fund operations increased from 90 projects in 1971-72 to 170 projects and \$1,394,000 in 1972-73.

The Publications Distribution Unit distributes all Statistics Canada publications and subscription statistical reports. During the year, 3,200,000 pieces of publication-related mail were dispatched and 93,500 pieces of mail orders were received. The subscription mailing list contained 270,000 addressograph plates while counter distribution totalled 18,500 publications.

PRACAS

New data collection methods and an optical character reading input system achieved considerable savings in time and resources for the bureau. Additional programming has provided analysis of man-year and resource utilization by project category and activity structures, permitting a regular review of achievements against planned objectives.

Records Management

Records management operations continued on a program of expansion into more bureau divisions. Installation of a standard file classification system in regional offices that is compatible with Field Division headquarters was completed. Moving semi-active confidential records from obsolete, fixed shelving to blocks of new, mobile shelving was completed. The section studied, with management consultants, storage equipment and facility requirements for the new tower and renovated main building.

Accommodations Services

Accommodations services administers approximately 700,000 square feet of office and storey office tower, scheduled for occupancy minimum pending completion of a new 25-

Production Services

Production services continued to provide

bureau-wide service in the areas of procurement and material management, duplicating, printing, forms management, addressograph and mailing, and typing and transcribing. Procurement and material management processed 5,253 invoices with a value of \$2,900,000. Forms management aided in the preparation and design of FOSDIC optical character reading documents for the 1974 test census. Assistance was also provided for design format of the vital statistics survey documents for provincial standardization approval and the implementation of metric size specifications. The mail and addressograph unit handled 36,699 bags of mail and 16,900,000 forms were addressed. In addition to processing 136,352 pages of typed material, the typing and transcribing unit was engaged in optical character reader output as well as expansion of automated composition of publication service. Over 11,000 pages of transcript involving 2,000 different issues were produced by production scheduling and liaison unit and forwarded to

Information services

- This organization is responsible for programs designed to improve the dissemination and use of the bureau's output, to improve response rates and to improve the bureau's overall public image.
- Information Division
- Library
- Year Book Division

Information Division

The Information Division continued to promote and increase awareness of the bureau through publications, news releases and displays. A key objective was to enhance the bureau's image with the aim of improving response rates.

Displays directed to specific audiences comprised a major program. Starting with an agricultural display at 11 annual farm meetings, the program gained momentum with a more elaborate exhibit package designed for the Allied Social Science Associations.

This exhibit, prepared in co-operation with the Economic Council of Canada, Information Canada and the Canadian Government Travel Bureau, was later used at other conferences in which Statistics Canada participated.

Among the new publications produced in 1972-73 was SCAN, a magazine for bureau employees.

Changes in the Statistics Canada Daily, the Weekly and news releases were made. They included making the Daily and the Weekly separately-edited publications and setting up a new Print Planning and Production Unit. The division designed respondent-relations packages, assisted in many direct-mail programs, and drafted letters eliciting support for several surveys.

Library

The division's drafting section was expanded in an attempt to meet the growing demand for charts and graphs.

Extensive assistance was given reporters preparing stories, especially those requiring census data.

The division's drafting section was expanded in an attempt to meet the growing demand for charts and graphs.

The Statistics Canada library is primarily an economic and statistics research facility serving the needs of staff officers, professional personnel, other government and university libraries.

The library maintains a comprehensive collection of monographs, serials, documents and reports as well as extensive runs of statistical publications of both Canadian and foreign governments.

During 1972-73, many recommendations made in a 1971 study, undertaken in co-operation with the National Library, were implemented. Acquisition procedures for library materials were studied and improved. The demand for reference service increased substantially and the quality of this service was improved.

A new catalogue to include all library resources throughout Statistics Canada was begun. A Statistics Canada library policy was approved and preliminary planning for the new

Year Book Division

The program of the division covers the planning, compiling, editing and annual publication of the English- and French-language editions of the Canada Year Book and the handbook Canada.

The Canada Year Book is an official basic reference work covering all aspects of the social, economic and political life of Canada. The 1972 edition was published in December. The handbook Canada 1973 was released in the spring of 1973 with a distribution of 200,000 copies, 43,000 of them distributed abroad by the Department of Industry, Trade and Commerce and the Department of External Affairs.

The balance was sold in Canada or distributed by other government departments.

A Special Inquiries Unit, drawing information from the Canada Year Book coverage of Canadian data and other authoritative Statistics Canada sources, supplied statistics for various United Nations publications and also for the International Labour Office. It also provides textual material for many reference works and up-to-date revisions of Canadian statistical and

dispenses current and historical data in response to multi-subject inquiries.

Major cost-recovery projects involving this division were drop-in student enrolment, highly-qualified manpower and bail reform act surveys.

The drop-in-enrolment survey, designed to measure the extent of university drop-outs and their characteristics, was completed during the summer and Treasury Board was to produce a publication based on it.

The highly-qualified manpower survey was undertaken for the Ministry of State for Science and Technology. To be based on a sample of university graduates identified by the 1971 Census, the survey is to collect additional information about them. A pilot survey in September, 1972, consisted of a sample of 4,000 persons taken from the February, 1970, labour force survey and 4,000 from the 1971 Census. The first sample was used to determine the expected non-response rate because the time interval between the labour force survey and the pilot was about the same as the expected interval between the census and the manpower survey. The census sample was used to test follow-up procedures. The pilot project is nearing completion, with data now on tape and undergoing editing and correction. Tabulations will be produced to test the entire computer system and to ensure that it is ready for the main survey in September, 1973. Work on it is well under way and a sample of records has been selected from the census tapes. Names and addresses of the selected persons are being prepared for computer-printed mailing labels. Questionnaire design is complete and the final draft of regional office procedures has been prepared.

Aside from the basic tabulations for the Ministry of State, the ability to extract tabulations on demand for research purposes will be built into the system. The bail reform act survey was undertaken for the Justice Department to obtain data on the effects of the new act proclaimed in January, 1972. Although court statistics have been collected, bail questions could not be incorporated in normal procedures and still meet time demands. A sample survey was recommended with a pilot survey to lay the groundwork for a full-scale 1973 survey. The field work for the 30-count pilot survey was done in September. Processing ran from November to March with preliminary tabulations supplied to the Justice Department in February. Final tabulations were expected by the end of March.

There are five major continuing keying projects which are sample-verified, using one or more quality control plans. Three involve key-editing, one involves key-punching and the last is a combination of both. In addition, quality control plans were developed and utilized for data capture of the 1971 censuses of population and agriculture. Most current surveys utilize key-editing and conversion of the re-Being considered.

Training, test materials and lectures were provided to key-punch operators on each

Cost Recovery Projects

survey because of the individual nature of each. Computer programs have been written and they are used, through terminals, to maintain an efficient quality control plan. A new quality control project was started this year for the manpower survey and another to establish the feasibility (from the points of view of production and quality of data captured) of utilizing optical character recognition (OCR) equipment to capture survey data directly from machine-readable documents.

Household Surveys Development

Staff

This division is generally oriented to the provision of methodological input to the design and conduct of sample surveys of households and can be considered within the framework of the following groupings: labour force survey, tourism and travel, methodology research, consultation and ad hoc surveys.

Labour Force Survey

(a) Maintenance and quality measures:

The sample control section and survey methodologists from the Household Surveys Development Staff control daily operations of the labour force survey: preparing sampling material, rotating sampling units, changing boundaries and dealing with various problems such as those posed by population growth. Non-response rates are calculated and evaluated every month and are broken down by area and type. Other quality measures produced every month include interviewer turnover rates, slippage rates (rate of lag between blow-up sample estimates and projected census population estimates), enumeration and travelling cost per household and document error rates. Other analyses include variance-covariance analysis in which variances are calculated for 40 characteristics collected in the labour force survey as well as the variance of differences and quarterly or annual averages. This analysis is also used as a control on sample yields.

(b) Sample redesign:

The labour force survey is being redesigned, to be complete in mid-1974, on the basis of the 1971 Census. The questionnaire is also being redesigned and a parallel run of both designs for at least a year will be required. An assessment and review team for new methodological developments has also been set up to co-ordinate and evaluate proposed changes through pilot studies with other groups and to perform methodological research.

The staff is also responsible for labour force methodological research for which the main vehicle is a sample of households examined every month to determine, for example:

- The use of different questionnaire styles; and
- Effect of respondent burden (large questionnaires) on refusal rates.

Some methodological and operational improvements will be introduced in the new survey design to minimize the impact of population growth on the sampling of households without major redesign. The efficiency of stratification

will be increased by using newly-developed automated methods.

Two alternatives for weighting supplementary survey data have been proposed and are being evaluated. The result is expected to be a general weighting program for various surveys attached to the labour force survey to improve processing timeliness.

Travel and Tourism

(a) Canadian Travel Survey, 1971

Sponsored by the federal tourism office, this survey measured the volume and value of travel by Canadians in 1971. About 13,000 households were interviewed on four occasions during 1971. Basic tabulations were produced in 1972 and a report was presented to the federal-provincial conference on travel and tourism. Reports on methodology and further analysis of data, evaluation of various aspects of data collection and processing are also being prepared.

(b) International Travel Statistics

A long-range program to meet expanded user demands has been developed to provide an alternative system of data collection on international travellers with the dual objective of increasing the efficiency and scope of data. New methods of sampling auto traffic entering Canada also are being studied with the objective of introducing a viable sampling scheme at all large airports. Methodology used in other international travel surveys is also being reviewed and appraised.

Consultation and Ad Hoc Surveys

The staff provides consultative services both to Statistics Canada and other government departments. Services provided, on a cost-recovery basis, included:

- Extensive methodology consultation,
- Sample size and estimation procedure determination;
- Sample stratification and selection;
- Control form design for field work;
- Imputation and weighting procedures;
- Results evaluation;
- Survey management assistance; and
- Acting as project managers.

Other

The staff has developed and presented an elementary course in sampling theory to junior statisticians and has also provided an advance course.

Quarterly reports on the methodology work pertaining to Statistical Services, of which Household Surveys Development Staff is one division, are widely distributed throughout the world.

Methodology and systems branch

This branch is involved with developing survey methodology, computer systems and programs for the processing of data. It also conducts applied research on all aspects of automation relevant in statistical information processing.

- Computer Systems Development Division
- Business Survey Methods Staff
- Census and Institutional Survey Methods Staff
- Household Surveys Development Staff

Computer Systems Development Division

A team effort involving General Survey Systems, the census geography section and 15 metropolitan area authorities this year gave Statistics Canada its first experience in the use of the GSDSR (geocoding) system developed over the last four years. The system has caught the imagination of many with requests for tabulations from federal departments, the private sector and others, surpassing the most optimistic expectations.

Another co-operative effort saw completion of a U.S. - Canada reconciliation project aimed at identifying the causes of differences in trade statistics between the two countries. It also was aimed at evaluating — over time — the stability of these causes, such as classification and value adjustments.

Advances were made in photo-composition techniques, particularly the automated handling of French accents. The result has been the first fully bilingual photo-composition — directly from computer output — without human intervention. In addition to the accents, this photo-composition incorporates upper and lower case, multi-front type, footnotes, etc., for a significant improvement in timeliness, a substantial cost reduction and a quality product. An

increasing number of publications now are produced by this method.

Additional retrieval capability has been provided on the Canadian Socio-Economic Information Management (CANSIM) system. The time-series data base is on-line at the Computer Service Bureau and can be used by federal departments and agencies through remote terminals.

The division stresses integration of small, individual procedures into more comprehensive, flexible systems that use standard code structures, modular processing, generalized programs and, in some cases, full data-base management systems. This emphasis has paid dividends, particularly where generalized modules could be linked to automated large-system segments without extensive custom programming.

The census system support group has concentrated its efforts on automating the census data dissemination and publication program through the use of the STATAPAK retrieval system (a data base of census data), some generalized programs and a conversational package through terminals. This system provides excellent responses to census data inquiries and permits, as well, the production of high quality photo-composition tabulations. Other areas where integration efforts were evident included health and welfare, where conceptual work was

Business Survey Methods Staff

This division is responsible for survey methodology services and, in some special cases, promotes integration of methods and systems aspects of surveys across the whole business statistics field.

The division was heavily involved in the development of the business register system. Now fully operational, the system has an extended file covering virtually the whole business surveys universe and is updated monthly. Emphasis is beginning to shift towards the development of systems in areas of the bureau which use the business register in their current

logical services and, in some special cases, promotes integration of methods and systems aspects of surveys across the whole business statistics field.

The division was heavily involved in the development of the business register system. Now fully operational, the system has an extended file covering virtually the whole business surveys universe and is updated monthly. Emphasis is beginning to shift towards the development of systems in areas of the bureau which use the business register in their current

Statistics Canada co-operated with OECD and the Conference of European Statisticians which had working parties on social indicators and systems of demographic statistics. The latter project continued the outline of the over-all framework of social statistics which started earlier. The bureau also took part in a social indicators seminar held by the Social Science Research Council and participated in various other seminars and learned society meetings in Canada. Discussions about social indicators were held with several provinces. Discussions continued with the Department of Environment on expansion of a data base and Statistics Canada was a member of a task force charged with the development of an over-all environmental quality index. A statistical program showing capital and depreciation costs incurred for pollution abatement equipment, based on data contained in Environment Canada files, was initiated and turned over for implementing to the CALURFA Division. A preliminary paper outlining the over-all framework for the development of environmental data was prepared. Statistics Canada was also represented on a working group of the Conference of European Statisticians which dealt with environmental statistics. An investigation was started into the feasibility of constructing urban environmental indicators from existing urban data bases.

¹ Central Classification and Company Establishment Integration Staff, which formerly included the Classification Section, now part of the Standards Division.

classification and control of coverage of business surveys. It replaces the central list of companies and establishments and greatly extends the facilities available to the survey-taking divisions.

The central list has become extremely difficult to maintain and is being phased out by virtue of a changeover from UIC to Department of National Revenue as the prime process agency for registration of new businesses. It is being replaced by the business register and as various functions are replaced the parallel central list operation is closed down. Started so far are

1. Allocation of numbers to new businesses at company and establishment levels;
2. Maintenance of an up-to-date name and address;
3. Maintenance of a whole visual index on microfiche.

The central list card index is being micro-filmed for archival storage. The central list computer-maintenance file was closed January 1, 1973.

Business register computer systems are complete and up-grading is being planned.

The register contains:

1. A record for each of the more than 500,000 PD accounts;
 2. A record for each component of the large employers survey list which gives rise to a multi-structure where necessary.
3. A number of specially-generated records to bring together multiple PD accounts in the same business, where it is not achieved in the ES structure.

Work of the sub-division consists of:

1. Processing the nature of business reports from new PD accounts;
2. Unduplication of the PD lists by identifying PD multi-situations and recording them correctly.

3. Reconciling the contents of the business registration with the Department of National Revenue, taxation corporate tax return (T 2) list, to increase register coverage to include all corporations as well as all employers (as defined by PD accounts);

4. Providing services offered by the old central list operation, including SIC and SGC coding and the allocation of numbers for businesses to be included in various survey files.

The sub-division is cleaning the register's contents to give a complete and unduplicated list of businesses in the country. This will consist of T 2 and PD-derived records. A business is defined by the T 2 if it is incorporated or by a PD or group of PDs if unincorporated. This work will be complete to an acceptable level by the end of 1973.

During the next year a number of additional activities are planned. These will include:

1. Reconciliation of the manufacturing and primary industries list with the register;
2. Reconciliation operations between the register and the list used by the census of manufacturing and services;

3. Experiments to extend register coverage to include unincorporated businesses without PD accounts.

4. Develop processing techniques to process more efficiently data entering the register and to achieve better access to the register's Optical character recognition (OCR) techniques for the nature of business report have been unsatisfactory with current documents and data preparation. Pending form redesign and technique re-evaluation, these data are to be prepared on punch cards.

A policy statement on the implementation and use of the business register and on the associated operations of profiling has been completed and circulated throughout the bureau.

Reorganization

In the February reorganization of Statistics Canada, the Classification Section left the Standards Division. In addition to classification division to form the nucleus of the new Branch and renamed Business Register and Profiling Division. It consists of the Business Register Sub-Division (formerly Central Register Section), the Tax Access - Special Assignment Sub-Division (formerly Company-Establishment Integration Section) and the Profiling Sub-Division (formerly responsible for reference profiling in the Economic Statistics Branch).

Consultant on Demographic

Research

The consultant on demographic research devoted a great deal of time this year to providing inputs to another federal government (department) project which involved simulation of population changes, the development of specifications for a system of social and demographic statistics and planning analytical research studies based on 1971 Census data.

The staff prepared data inputs for a model a hypothetical sample of the Canadian population composition from individual level information. The composition variables include age, marital status, labour force status and schooling level. The model was initially developed for Ontario at the Institute for Quantitative Analysis of Economic and Social Policy, University of Toronto, and was subsequently modified for national application with the consultant on demographic research participating.

The consultant prepared a blueprint for a system of social and demographic statistics and two additional papers setting forth desiderata for improvement of statistics concerning population growth processes in general and fertility in particular. The system's central concepts are

intended to embody guidelines for some aspects of future Statistics Canada data development.

In preparation for analytical research studies based on 1971 Census data, the consultant has chaired the Census Standing Research Committee and led the Task Force on Authors and Topics of 1971 Research Projects. The consultant's staff developed basic concepts for network analysis of research project activities and of the related planning activities system.

The consultant chaired meetings of the Inter-Divisional Technical Committee on Projections, and started a survey of divisional plans for future projection work.

The consultant also provided research advice and scientific reports to several agencies including Ministry of State for Urban Affairs and Department of Finance.

Regional and Urban Research and Development Division

Bureau reorganization has resulted in the extension of the analytical frameworks adopted for the current program is regional and urban input-output structures. Work was started on constructing a set of provincial input-output tables with 1966 data which will be compatible with the national table. In the urban field, work was also started on designing an analytical framework for ordering urban information and helping assess urban data requirements.

The most significant project before reorganization was construction and testing of a regional model to estimate current population and migration. Work has started on the calibration of the model to improve its performance. The major merit of the model - beyond producing age and sex breakdowns of county population estimates - is its potential to estimate migration flows on a year-to-year basis.

- The following co-operative research projects were completed
- With Manitoba, the feasibility of using provincial administration records for estimating small-area population.
 - With Nova Scotia, the feasibility of using provincial administrative records for estimating subprovincial retail sales was examined.
- At year end, preliminary work resumed on regional unemployment estimates and later jointly with other bureau divisions and federal agencies.

Office of the Senior Advisor

on Integration

The first draft of approximately half of the planned chapters for a compendium of social statistics was written and circulated during the fiscal year.

Part 2 : The central management and services groups

Integration and development staffs

This group provides a variety of centralized services to subject-matter branches and acts to further the quality, effectiveness and coherence of the national statistical system.

- Business Register and Profiling Division
- Consultant on Demographic Research and Regional and Urban Development
- Office of the Senior Advisor on Integration

Business Register and Profiling Division¹

The division's work falls into three main areas:

- The Classification Section maintains, revises for federal public service pay categories in relation to the occupational employment survey and on the occupational detail provided in the dictionary volume of the *Canadian Classification and Dictionary of Occupations*. Industrial classification work consisted primarily of handling inquiries and ruling on problem cases.
- Volume 1 of the revised *Standard Commodity Classification* was published and the staff now has turned to developing companion alphabetical and numerical indexes to support it and a master computer tape to maintain it. The tape will link standard commodity codes to the various related classifications used in the bureau.
- An interim addition of the *Standard Geographical Classification* was published and a special edition was produced for coding Ontario vital statistics data. The master tape file was expanded from 28,000 to 38,000 place names drawn in preparation for the publication of an edition for sale to the public.

Classification Section

The Classification Section is responsible for *Standard Industrial Classification*, *Standard Commodity Classification*, *Standard Geographical Classification*, the *Canadian Classification and Dictionary of Occupations* and *Classifications Research*. The classifications are essential for the integration of statistical data by facilitating comparison of data and identifying both coverage gaps and overlaps. The staff was heavily involved in advising on occupational classification implementation problems and in setting up and organizing a

Company-Establishment Integration Section

During the fiscal year, two large samples of about 20,000 cases each were used to evaluate the relationship between income tax data and existing survey questionnaire data. The first were farm business tax returns and data obtained are being used by the agriculture division as an independent source as well as in conjunction with current statistical series. The second sample contains sub-sets from all other industries. (Initially, results were obtained from feasibility studies providing industrial and geographic coding for unincorporated businesses from tax returns, financial statements and from analysed related statistical data.

Plans have been made to use 1973 tax returns for non-respondents and specified respondents for the transportation, construction and manufacturing and primary industries division. It is expected this exercise will enhance 1973 statistics and reduce questionnaire respondent burden in 1974.

Business Register Sub-Division

The Business Register Sub-Division is responsible for the business register, which provides the basic vehicle for establishing consistency of

special tabulations and tables for publication from the data base provided by the 1971 Canadian travel survey.

The reorganization of Statistics Canada resulted in a transfer of the travel statistics staff to the Education, Science and Culture Division, where a new section has been established to carry on the co-ordinating role. It takes direct subject-matter responsibilities for areas in the travel, tourism and recreation sector not already assigned to other divisions.

Inquiries Section

The Inquiries Section handled about 2,000 inquiries each month. It published the 1972 edition of the Statistics Canada Catalogue of Publications, an important users' guide, featuring separate English and French subject and commodity indexes. The manuscript for the next edition is maintained on a day-to-day basis, making it possible to issue supplements regularly to update the annual catalogue.

* Subsequent to the close of the fiscal year, Census was created as a separate field under the responsibility of an Assistant Chief Statistician.

1 Formerly Census Division

2 Formerly Consumer Finance Research Staff

3 Formerly Education Division

expanded to eight provinces effective January

1, 1973.

Exploratory work was undertaken with the Department of Consumer and Corporate Affairs

for the development of statistics on causes of accidents.

Volume II of the French translation of International Classification of Diseases,

Adapted (Classification internationale des maladies, adapted,) which provide an index to

Volume I, was published.

The Hospitals Section is concerned with the analysis of data relating to the institutional and

economic aspects of Canadian hospitals.

Timeliness was improved in the annual hospital statistics program. The Canadian sched-

ule of unit values for clinical laboratory procedures, used in measuring laboratory workloads,

The User Advisory Services Division, which is part of the Marketing Services Field, was

created when Statistics Canada's administration was reorganized February 1, 1973. Its major

responsibilities include:

- Provision of information and advisory services to users and suppliers of data;

- Organization and co-ordination of continuing liaison with all levels of government, business,

- foreign countries and international agencies;

- Development and extension of data use;

- Development of a statistics clearing house, or information centre;

- Improvement of feedback mechanisms to provide information on new and changing

- data requirements and with assessments on data quality and timeliness.

A basic experienced staff was provided by uniting Statistics Use Development, the liaison

staff or Provincial Liaison and Consultative Services Division, and the Inquiries Section of

Information Division.

The activity summaries are presented as they existed prior to reorganization.

Statistics Use Development

Stimulating the use of Statistics Canada output continued in 1972-73 despite the loss of almost

half the staff through promotion. This role of using the use of Statistics Canada data was

examined closely by a departmental study group and several recommendations resulted.

First recommendation approved is to provide analysis of all Statistics Canada subscribers to

make dissemination more effective. A second bureau-wide survey of inquiries be undertaken.

To become more familiar with the services offered by the United States Bureau of the

Census, a staff member attended a week-long intergovernmental seminar in Washington. At

home, the section shared its experiences with an Australian Bureau of Census Statistics repre-

sentative who spent several months working in Ottawa.

Seminars across Canada, sponsored jointly with subject-matter divisions, this year focused

on labour statistics and 1971 agriculture census results. A workshop on chemical statistics was

to be held late in 1973.

Updating How to Profit From Facts, a case-history booklet for business owner-

operators, was started. An article on use of

reporting program that was designed for

Quebec and Nova Scotia.

Plans for unit official and statistical documents for juvenile courts were extended

to all provinces.

A publication on a 10-year murder study was released.

● Timeliness and diagnostic programs for court and corrections were planned.

● Scheduling for the automation of all programs was established.

● A pilot study of the effects of the Bail Reform Laws was undertaken, and

● Facilities for special studies were established.

The User Advisory Services Division, which is part of the Marketing Services Field, was

created when Statistics Canada's administration was reorganized February 1, 1973. Its major

responsibilities include:

- Provision of information and advisory services to users and suppliers of data;

- Organization and co-ordination of continuing liaison with all levels of government, business,

- foreign countries and international agencies;

- Development and extension of data use;

- Development of a statistics clearing house, or information centre;

- Improvement of feedback mechanisms to provide information on new and changing

- data requirements and with assessments on data quality and timeliness.

A basic experienced staff was provided by uniting Statistics Use Development, the liaison

staff or Provincial Liaison and Consultative Services Division, and the Inquiries Section of

Information Division.

The activity summaries are presented as they existed prior to reorganization.

Statistics Use Development

Stimulating the use of Statistics Canada output continued in 1972-73 despite the loss of almost

half the staff through promotion. This role of using the use of Statistics Canada data was

examined closely by a departmental study group and several recommendations resulted.

First recommendation approved is to provide analysis of all Statistics Canada subscribers to

make dissemination more effective. A second bureau-wide survey of inquiries be undertaken.

To become more familiar with the services offered by the United States Bureau of the

Census, a staff member attended a week-long intergovernmental seminar in Washington. At

home, the section shared its experiences with an Australian Bureau of Census Statistics repre-

sentative who spent several months working in Ottawa.

Seminars across Canada, sponsored jointly with subject-matter divisions, this year focused

on labour statistics and 1971 agriculture census results. A workshop on chemical statistics was

to be held late in 1973.

Updating How to Profit From Facts, a case-history booklet for business owner-

operators, was started. An article on use of

federal financial statistics by business was

prepared for the Canadian Institute of Char-

tered Accountant's Journal.

Provincial Liaison and Consultative Services

A number of formal committee meetings of the seventh federal-provincial conference on eco-

nomie statistics involved the staff in a co-ordinating and secretariat capacity. Staff

members attended several federal-provincial conferences. They also arranged and partici-

pated in work sessions with bureau staff and provincial officials.

With proclamation of the new federal Statis-

tics Act, the staff was requested to revise the existing federal-provincial co-operative agree-

ments related to statistical developments and to develop new agreements. Several have been

formalized.

Some research has been initiated to try to determine future demand and supply of statis-

ticians in Canada. Training facilities at Statistics Canada have been made available to provincial

statisticians.

A provincial liaison officer and a regional

statistics research staff member were loaned to the Prince Edward Island government for two

months to examine the organization and use of information from administrative data files in

provincial government departments. Another

staff member was loaned to the Saskatchewan

government for three months to help define the

terms of reference of the new Statistical Infor-

mation Centre.

The staff participated in several joint

projects, the largest being the Halifax Joint

Research Project, working with provincial and

municipal governments.

In addition to visits to all provinces, an

informal news bulletin, Federal-Provincial Sta-

tistical News, was published to keep the

federal-provincial conference on economic sta-

tistics delegates better informed of develop-

ments in the bureau and in the provinces.

For the major portion of the year, the

division also provided a focal point for travel

statistics in the bureau. A number of programs

have been carried out including the introduc-

tion of a new annual, titled Travel, Tourism and

Outdoor Recreation — A Statistical Digest. Its

purpose is to bring together all Statistics

Canada data related to travel, supplementing it

with information obtained from other govern-

ment departments and international agencies.

The service also provided the secretariat for

Federal-Provincial Conference on Tourism, its

technical subcommittee, and the federal inter-

departmental committee on travel, tourism and

outdoor recreation research. The service has

undertaken a continuing project for the Travel

Research Planning Committee by developing

standard definitions and classifications.

A major activity, in co-operation with the

office of Tourism and Statistics Canada's

Methodology and Systems Branch, is the devel-

opment of domestic travel statistics. Assistance

was provided in the planning and developing of

tems and integration of education information systems to create an accessible data base of fundamental elements dealing with students, teaching staff, finance and facilities in universities and community colleges. Common concepts, classifications and definitions are provided to facilitate comparisons. Supporting computer systems are being developed simultaneously.

Statistical profiles and analyses of education in the Atlantic and western provinces were prepared and additional regional studies are in progress. Also in progress are the following special projects: Education in Canada: A Statistical Perspective; A decade of Education Finance in Canada.

A study of estimated highly-qualified manpower in Canada was undertaken together with a survey of federal and provincial student aid in Canada, minority language education, short-fall in university enrolment, leisure-time activities, and physical education in Canadian schools.

A display consisting of six educational statistical panels designed for use at the Learned Societies and Education Forum is being produced.

Together with the geocoding section, the division initiated a geocoding program to determine social characteristics (derived from the 1971 Census) of students for individual school board areas.

The division also played an important role in analysis of the 1971 student census project. A divisional special study on socio-cultural characteristics of elementary and secondary students was also undertaken. Another special study was initiated when Education Stratification in Canada was included in the 1971 Census analytical studies program.

A quarterly education service bulletin continued to present tables with analytical text and commentary and facilitated the rapid release of current education data, creating a favourable image for the division and the bureau.

A total of 44 bilingual publications were produced by the division, consisting of 31 manuals, four occasional and nine issues of the service bulletin. Quality continued to be enhanced with more timely data, better textual material and improved graphic layout. The division has re-examined its publishing program, completely reorganizing its formats with greater emphasis on short survey reports.

Special annually-published tabulations issued included: salary scales for teachers at Canadian universities and colleges; tuition and living accommodation costs at Canadian degree-private trade schools; post-secondary vocational courses in publicly-operated institutions; inter-provincial movement and immigration of children in Canada.

Manuals produced included: a classification of discipline; a student data file; how to use the student data file; a teacher data file; and a financial data file. These were part of the developing computerized education information system. A reference manual on the publishing of reports is in progress.

Field Division

In recent years, the need for a reorganized field capability within Statistics Canada became evident and, following the change of name and scope of responsibilities in 1971-72, the reorganization became effective January 15, 1973. Through its eight regional offices, the division is more capable of responding quickly and effectively to requirements of sponsors and

The surveys subdivision develops procedures for conducting data collection for the labour force and any auxiliary surveys. Procedures for the collection of retail prices for the Consumer Price Index is an on-going project but the universe is being constantly updated. In addition to regular business surveys, new surveys are conducted such as the trucking origin and destination survey. A job vacancy survey is conducted and new programs such as the occupational employment survey are implemented. A special projects section responsible for ad

A special projects section responsible for ad hoc and supplementary surveys on short notice, as well as on a regional or national scale, has been developed. Some of the more prominent special surveys include Nutrition Canada, Highly-Qualified Manpower Survey, Family Expenditure Survey, Acreage, Livestock and Income Enumeration Survey, and Ball Reform Survey. A number of new programs are being developed for data collection in 1983-74.

The division is developing procedures for the revised labour force survey to bring a new dimension to the measurement of changing definitions of labour force activities. Field Division has full responsibility for

developing field procedures and training programs for the test and quinquennial censuses in Canada. Planning now is under way for the 1974 test census. It will lead to the 1976 Census, retaining the basic self-enumeration approach used in 1971 but containing a number

of procedural improvements. Activities of the surveys and censuses sub-divisions are supported by in-house establishments supplying personnel and financial services as well as central training and project

Health and Welfare Division

The Health and Welfare Division is organized into five major sections – Vital Statistics, Mental Health, Public Health, Hospitals and Health Manpower – that provide a wide range of health statistics. In addition, each section undertakes special studies and the integration of data systems within and without Statistics Canada.

For statistics on births, deaths, stillbirths, marriages and divorces, it publishes regular reports and supplies to the provinces tabulations for births, stillbirths, marriages and deaths in accordance with federal-provincial agreements. Requests for information continued, with an increase in those for intensive investigations.

of nuptiality and fertility patterns and for information on mortality. As a result, several analytical studies have been published and others planned which relate to cancer, accidents, heart disease, mental and physical health. To reduce the cost and time to process vital records, arrangements have been made with several provinces to share the expense of processing birth, death and marriage records.

Further economies are being effected through computerization and standard forms for the registration of births, stillbirths, marriages and deaths are being developed. These revisions will be incorporated into the present format and formats and computer programs. Negotiations with provincial authorities are progressing on a standard classification of local geographic areas to facilitate compilation of basic vital statistics data on births and deaths, primarily for population projections.

Work is progressing on techniques for the automated linkage of records of births, marriages and deaths to produce new statistics on child-spacing, fertility trends, duration and pattern of marriage and divorce and probability of survival for patients with specific diseases. This section also provides secretarial services to the Vital Statistics Council and its committees and studies problems referred to it.

The Mental Health Section continues to form a fifth annual mental health preliminary report was published in January, 1973, and the detailed 1971 annual report was completed recently, using a redesigned and more efficient statistical processing system. A report on psychiatric patients between 1966-69 will be published in 1973.

An effort to reflect recent changes in psychiatric care continued during 1972 with the main emphasis on halfway houses, day and night centres and other facilities.

The Public Health Section produces statistics on individual morbidity treated in hospitals, on tuberculous, or newly discovered sites of malignant neoplasms, on certain communicable diseases and on therapeutic abortions. Public health refinement in the exploitation of the information received. Reports were published on no surgical procedures and treatment. Special tabulations were produced, analysing length of stay due to deaths of patients undergoing surgery. Special tabulations were produced including tabulation of hospital illness by geographic subdivisions. A special tuberculous tabulation by counties and census divisions—together with a new tabulation based on year and country of origin of immigrants—developing tuberculous diseases.

available. Tabulations of geographic incidence of cancer statistics were produced and planning started on a special study to be done in cooperation with the National Cancer Institute. Two reports on therapeutic abortions were issued during 1972. An individual-cases reporting system for therapeutic abortions was

1971 Census data and extend to the year 2001. Two principal projects based on the projections included production of specific projections for the Privy Council and the Department of Manpower and Immigration. Supplementary projections were prepared for the Census Field to aid 1976 Census planning.

A series of bulletins produced by the estimates unit included Estimated Population of Canada and Provinces as of June 1, 1972, Revised Annual Estimates of Population, by Sex and Age for Canada and the Provinces, 1921 to 1971, and Quarterly Estimates of Population for Canada and Provinces. Population estimates for metropolitan areas were prepared but were not published. Studies were carried out on the feasibility of using income tax or medical care plan data for estimating migration and on the methodology of estimating interprovincial migrants.

The Geography Section compiled population data for geostatistical areas, prepared census maps, documentation and reports for publication and developed both the spatial basis for geocoding 1971 Census data and the geographic retrieval package of geocoded data. For 1976, the section reviewed existing geostatistical area programs, expanded the program to update census base maps annually and developed new programs such as census blocks. In preparing for the 1976 Census, needs of users, particularly those of federal and provincial departments, were assessed. A list of questions was evolved and approved by cabinet for the 1976 population and agriculture censuses.

Content manuals for the 1974 test census were being developed.

The Planning Section, created this year, has been involved in developing major program requirements for the Census Field and in co-ordinating into a tactical plan project development of other units. Its major concern has been plans for the 1974 test census.

A comprehensive evaluation system including coverage, quality of data, adequacy of methods, procedures and organizational suitability has been developed for the 1974 census test. Similar preliminary work has begun for the 1976 Census as well.

Progress has been made in the Census-Related Surveys Section, whose role it is to plan and direct cost-recoverable ad hoc surveys. These are structured from a census data base to meet specific requirements of customers — government departments, municipalities, etc. — and designed to test alternate methods of collecting census data. A survey of highly-qualified manpower will take place in September, 1973.

Consumer Income and Expenditure Division²

The publication of special reports based on results of a survey of consumer finance 1968, based on income for 1967, were completed and three reports were published:

13-537 An Econometric Study of Incomes of Canadian Families, 1967

13-540 Household Facilities by Income and Other Characteristics, 1968

13-541 Economic Characteristics of the Population Age 14 to 24, 1967.

The consumer finances survey taken in 1970 collected 1969 income data and characteristics of the sample families as well as data on assets and debts. The standard income report Income Distributions by Size in Canada, 1969 was followed by a report on income of families and persons not in families — Family Incomes, (Census Families), 1969. A large volume of asset and debt data was produced and the report Incomes, Assets and Indebtedness of Families in Canada, 1969 will be released in April, 1973. A report on low-income families and their wealth position has been completed and will be published in 1973. Several special studies are still in progress.

In the context of developing distributions on the basis of personal income in the national accounts conceptual framework, the survey of consumer finances records were matched with records from the 1970 family expenditure survey. The synthetic records obtained from this matching contain a wider range of information than the two surveys separately. Combined income components will be added to obtain a modified personal income concept. Direct taxes can be subtracted and income distributions estimated, for the first time, for families based on their disposable personal income.

If successful, this developmental work data will be submitted to the United Nations where an experimental project is in progress. Seven countries are compiling comparable income distribution estimates. This project is an offshoot of development work on a complementary system to the system of national accounts to deal with the distributional aspects of income and expenditure.

Surveys of consumer finances are now taken annually. The first annual one was taken in conjunction with the labour force survey in April, 1972, and is the largest intercensal income survey ever taken in Canada. Data are available for 30,000 sample households. Some preliminary data on incomes were released in October, 1972, in Income Distributions by Size in Canada, Preliminary Estimates, 1971. A standard detailed income report will be issued in May, 1973, to be followed by a report on incomes of census families. Some special studies will also be undertaken such as looking at the unemployed, their income and their family situations.

For about 25,000 sample households, data on incomes, labour force, personal and family characteristics will be linked with data from the household facilities and equipment survey to publish a report similar to Household Facilities by Income and Other Characteristics, 1968. Data on housing value and mortgage status for owner households and rents for tenant households will be available also.

Planning for the 1973 spring income survey covering 12,000 households has been completed. In addition to the regular income questionnaire, respondents will also be asked about long-term work histories with emphasis

Education, Science and Culture Division³

range programs in this area.

During the year, the division's expanded objectives became more clearly defined and implemented with changes ranging from new organizational structures and patterns to production of regional publications. As part of the bureau's 1973 reorganization, the name of the division was changed to the Education, Science and Culture Division, to reflect more accurately the structural expansions and increased responsibilities. Divisional activities cover elementary, secondary, post-secondary and vocational continuing education together with culture, travel and science statistics.

Included among new statistical surveys were: school transportation, media utilization, federal government expenditures on human sciences, federal student aid, handicrafts, museums and art galleries, facilities for the study of arts, Canadian literary awards, leisure-time activities, physical education in schools, salaries and qualifications of community college teachers, diplomas and certificates awarded by Canadian degree-granting institutions, students and social work, minority-language education, continuing education registrants in school board programs, continuing education enrolment at community colleges and universities, short-fall in university enrolment, studies in tourism, regional science statistics, inventory of research and development facilities and studies in technological innovation.

The division is assisting in the development

on breaks in work during the last five years. Continuity information is an important variable in explaining the level of earnings but it is seldom available.

The report on the small-area income estimates for counties will be released later in 1973. A post-census research program has been approved with the studies focusing on factors underlying income inequality and poverty as well as on income trends over the 1967-71 decade. They start in late 1973. Part of the research will examine low income lines to analyse poverty.

The division was represented at a conference of European statisticians working on a system of demographic and social statistics and meetings of the Conference of Caribbean Statisticians. Staff members participated in Statistics Canada committees on social indicators, the statistical utilization of income tax data and on the planning of the 1976 Census. Assistance was provided for studies of tax incidence and benefits and simulations of program changes.

With reorganization of the bureau February 1, 1973, the Consumer Finance Research Staff was joined by the Family Expenditure Section from the Prices Division to become the Consumer Income and Expenditure Division. The division is responsible for all household surveys dealing with income and expenditure and for implementing consistent and compatible long-range programs in this area.

The Special Projects and Research Section has a major responsibility in the planning, development and implementation of computer systems for the Agriculture Division. These activities involve co-ordination of the work by commodity statisticians in the Agriculture Division. The section also participates directly in defining the requirements for data processing and in specifying the contents and format of data input and output.

During 1972-73, the section continued to operate the agricultural survey processing system to capture, update and process data from the June and December surveys of crops and livestock. Modifications to the agriculture survey processing system were required to accommodate the 1971 Census identification and to allow matching 1972 December survey records with previous surveys. The system was also refined to allow more flexibility in the level of geographical summarization.

Work continued on the development of the 1971 central register of farm systems. The name file was created by capturing name, address and headquarters location of approximately 366,000 census farm operators from the 1971 Census of Agriculture questionnaires. The master files for the central register of farms linked the name file and the Census of Agriculture data file, creating a list that contains the name, address and related census information for each census file. The update phase was designed and implemented and the retrieval phase was designed during 1972-73. This register was used to address the questionnaires for the 1972 December survey of crops and livestock. Related 1972-73 activities included:

1. A computer-manual name match of farm operators on the updated 1966 farm mailing list and the 1971 central register of farms to enable the matching of records from the 1972 December survey of crops and livestock with previous surveys;
2. Postal coding for those areas included in the coding system at August, 1972. (Postal coding permits mail bundling by the post office, qualifying third-class mail for both rates.)

Ad hoc requests were received from the division's commodity sections and from external sources for the lists of farm operators on the 1971 central register of farms producing specific commodities.

Systems analysis of the integration of commodity surveys was started during 1972-73. It is expected that the agriculture surveys processing system, with some modifications, will handle the majority of the farm-oriented commodity surveys.

Census Field

The Census Field has been deeply involved both with the processing and dissemination stages of the 1971 Census and with detailed preparations for the 1976 Census.

Census Field

commodity surveys.

modity surveys was started during 1972-73. It is expected that the agriculture surveys processing system, with some modifications, will handle the majority of the farm-oriented com-

specific commodities. Systems analysis of the integration of com-

qualifying third-class mail for both rates.)

2. Postal coding for those areas included in the coding system at August, 1972. (Postal coding permits mail bundling by the post office, previous surveys;

operators on the updated 1966 farm mailing list and the 1971 central register of farms to enable the matching of records from the 1972 December survey of crops and livestock with

level of geographical summarization. Work continued on the development of the 1971 central register of farm systems. The name file was created by capturing name, address and headquarters location of approximately 366,000 census farm operators from the 1971 Census of Agriculture questionnaires. The master files for the central register of farms linked the name file and the Census of Agriculture data file, creating a list that contains the name, address and related census information for each census file. The update phase was designed and implemented and the retrieval phase was designed during 1972-73. This register was used to address the questionnaires for the 1972 December survey of crops and livestock. Related 1972-73 activities included: 1. A computer-manual name match of farm

operate the agricultural survey processing system to capture, update and process data from the June and December surveys of crops and livestock. Modifications to the agriculture survey processing system were required to accommodate the 1971 Census identification and to allow matching 1972 December survey records with previous surveys. The system was also refined to allow more flexibility in the

data input and output.

The Special Projects and Research Section has a major responsibility in the planning, development and implementation of computer systems for the Agriculture Division. These activities involve co-ordination of the work by commodity statisticians in the Agriculture Division and specialists in the statistical services field. The section also participates directly in defining the requirements for data processing and in specifying the contents and format of

farmers' income tax returns was used to generate certain expense and receipts estimates as well as to provide information on net income

In the Farm Income and Prices Section, statistics.

well as in avoirdupois. A consensus was reached with provincial statisticians to discontinue publishing horse statistics.

Considerable time was spent revising inter-
censal estimates for 1966-71, bringing them
into line with the census benchmarks. This
large project now is almost complete. The first
livestock and animal products section survey to
be successfully automated was a meat stock
survey. Work is continuing on other cold
storage surveys and the quarterly pig survey.
Liaison between the section and the Sampling
and Surveys Research Section started to de-
velop improved sampling techniques for the
special surveys on poultry and eggs, swine and
dairying. The new methods will be better
adapted to the increasing forces of consoli-
dation and specialization occurring in agriculture.
The section participated in Project 75, a task
force consisting of members of government,
private industry and producer groups which was
set up to investigate the beef information
system and to recommend improvements. Re-
search was carried out on home consumption of
milk, resulting in revision of this series for the
years 1966 to 1971. Three dairy publications
and one cold storage publication were made
bilingual in the past year. Meat production and
disappearance was published in metric tons as

Several livestock and animal products section projects undertaken in 1971-72 were continued in 1972-73 and these included further automation of the processing of the section's two large-scale semi-annual surveys results. A study to develop an alternative method of estimating total milk production, carried out in co-operation with the Canadian Dairy Commission in Ontario and Quebec in 1971-72, was extended in Manitoba in 1972-73. Close liaison with the farm products marketing boards pre-harvest forecasts.

which are not confined to the crop section. Objective crop estimates were continued in Ontario and New Brunswick. The Quebec Bureau of Statistics apple yield program, in which we co-operated, was also carried out again. In Ontario, there has been discussion about the use of survey results as the basis for the official

was held with the Horticultural Council of Canada. This provided an opportunity to present a general review of the bureau's activities

mailed questionnaires. In February, a one-day statistical conference

the federal-provincial conferences on agricultural statistics held in Quebec City and Regina. Preliminary studies were also made of media advertising to obtain better response rates to

seminars.

staff conducted research on migration, population growth, families and households, type of results are contained in a wide range of documents including lengthy publications, papers published in scholarly journals and reports on needed research. The section also helped prepare press releases on population projections and zero population growth. It also provided consultative services to the Department of National Health and Welfare in the family planning field and participated in various national and international conferences and

central User Inquiry Service for census products and services during the year. It produced various user-oriented working manuals and publications to ensure efficient and effective use of census data. It also played a major role in liaising and servicing provincial governments and census data requirements.

In addition to the compilation, 1971 Census data dissemination has been by summary tapes and microfilm. Workshops were held with data users to inform them of the nature and availability of census information. The Data Dissemination Section developed

The population and housing subdivision of agriculture data were discussed. The population and housing subdivision produced a large number of advance series reports. None, however, was released on economic characteristics due to processing delays with the "long" questionnaires. Some late series reports have been published and, in answer to specific requests, special tabulations

completed. Agriculture personnel held workshops in most of the provinces, with representatives of the provincial government, agriculture, academic institutions and farm organizations. The Agriculture Data Directory, published in September, 1972, and the dissemination

the 1940 national registration records. During the year, the agriculture subdivision had 17 of 18 agriculture advance series reports

short form 2A. Pension searches processed about 14,500 requests, mainly from private individuals, for proof of age from census records. They also answered 16,000 requests for information from

Final 1971 Census counts became available early in 1972, including detailed population distributions for revisions of electoral boundaries and for mother-tongue classifications required by the Official Languages Act. The Bilingual Districts Advisory Board was also supplied with small-area special tabulations and computer maps. Census results have also produced population distributions for many types of geographical areas, as well as classifications by sex, age groups, marital status, mother-tongue, household and family size and composition – information contained from the census.

Socio-economic statistics branch

The responsibility of the Socio-Economic Statistics Branch has been the development, collection and analysis of comprehensive systems of socio-economic and demographic information to meet the demands of today's planners and policy-makers. These information systems encompass data on the life cycle of individuals and families from birth to death, thorough education, nuptiality, fertility, education, morbidity, employment, mobility, income and housing. Information on education is derived from schools, universities, etc.; on the judicial system from the police and the courts; and on health and vital statistics from hospitals and provincial registrars and others. In these areas, provincial governments not only provide intensive assistance but also are extensive users of the resultant data.

The largest survey conducted by Statistics Canada and for which the Socio-Economic Statistics Branch has been responsible is the Census of Canada, conducted every five years. In the last year, the Census Division has been publishing results of the 1971 Census and evaluating that program as well as making plans for the 1976 Census and preceding tests.

The February, 1973, reorganization of Statistics Canada was designed to provide an organization more responsive to the growing

Agriculture Division

The Agriculture Division encompasses the planning, operation and co-ordination of a statistical system for the collection, evaluation and publication of annual, monthly and seasonal information concerning the agricultural industry. The division's statistical program is conducted in co-operation with the provincial government departments with some joint surveys and other program-sharing arrangements. Close co-operation is also maintained with federal government departments, especially the Canada Department of Agriculture, and agencies for program planning and the securing of administrative data for developing and supplementing the basic statistical series.

A new annual enumerative sample survey was started in July, 1972. About 6,000 farmers were interviewed to obtain basic information on crop acreages, livestock numbers, farm inventories of grain, farm numbers and farm and off-farm income. This survey is designed to provide more frequent benchmarks, which have been provided only once every five years by the Census of Agriculture. However, this is not frequent enough at a time when the agricultural industry is undergoing rapid structure changes. Because of the difficulty in foreseeing all of the problems associated with the introduction of this new survey, it tends to be developmental

during the early stages of implementation. The initial results are encouraging but there is nothing yet which can be used for official purposes. It may be another couple of years before it becomes fully operational.

In the crops section, much of the data on principal grain and oilseed crops are collected by mail questionnaire surveys of farm correspondents. Allied with these surveys are those grain milling and oilseed crushing industries. Information is published on growing conditions, acreage intentions, fertilizer use, probable yields, farm-held stocks of grain, prices received by farmers and crop production. The information is designed to meet the requirements of farmers, marketing agencies and allied industries and the data are integrated with other statistics emanating from the Canadian Wheat Board, Canadian Grain Commission, trade groups and several government departments to provide continuous studies on the supply and disposition of Canadian cereal and oilseed crops.

An agricultural reporting program on world trade, grain and oilseed crops is maintained with the Canadian Trade Commissioner Service to provide better assessment of Canada's international position.

In addition to the regular program, several new techniques were tested in the crops section.

tion. Emphasis was placed on applying electronic data processing (EDP) technology to determine whether costs would be reduced, efficiency increased and more penetrating analysis provided.

A two-part test of optical character reading (OCR) equipment to reading completed farm questionnaires was concluded. One involved a questionnaire in which pencilled figures had been entered. The farm correspondent satisfactorily filled in the questionnaires based on visual assessments and the mark-sense part of the test was read quite satisfactorily, but the OCR equipment was not able to discern the pencilled numbers adequately.

Techniques have been adopted in publication automation that resulted in significant progress in the preparation of copy for printing Grain Milling Statistics, with the main areas of savings being reduction of proofreading. The work of preparing intercensal revisions for both field crops and special crops for the 1966-71 period has been completed at the Operation Feedback, a program to enhance dissemination of the statistical output of the division, was continued. Emphasis was placed on the use of displays at farm meetings with discussions about this approach taking place at

- Agriculture Division
- Census Field
- Consumer Income and Expenditure Division
- Education, Science and Culture Division
- Field Division
- Health and Welfare Division
- Judicial Division
- User Advisory Services

Public Finance Division

income and expenditure accounts information.

The division completed its review of its financial management statistical series and, to meet requests of users, published *The Canadian System of Government Financial Management Statistics* which explains the concepts, classification frameworks and methodology employed in the series. As a result of the review, numerous changes were made to preceding approaches and practices. A historical revision of back-data will be undertaken in 1973-74 along with actual data for 1970-71 and 1971-72.

Developmental work on quarterly financial management series of provincial governments was completed and, subject to provincial approval, releases of current information will begin in 1973-74.

A pilot survey to identify local government entities in their inter-relationships was carried out in Halifax and Saskatoon. Encouraging results precipitated the proposal that the survey be extended to other metropolitan areas.

Implementation of standard accounts classification systems by municipalities was promoted at the annual conference with the provincial municipal affairs departments and at municipal briefing sessions held in two provinces.

The division implemented automated processing procedures in respect to one quarterly and one annual publication. Further automation for timeliness and economy is planned.

The division had a major role in encouraging Treasury Board to constitute an inter-departmental committee to work on improving the existing federal financial information system and developing additional dimensions to it.

The principal new development relating to the system of national accounts was preparatory work for a quarterly survey of school board revenue and expenditure to be initiated in 1973.

The division prepared data used in the calculation of federal equalization payments to the provinces. In addition, after the Minister of Finance announced plans to equalize revenues for real property taxes levied for school purposes, the division initiated work on isolating the amounts involved.

book profit with taxable income is provided, indicating the varying impact of the main income tax provisions in determining taxable income as well as the magnitude of the main items of income and expenditure which are treated differently for income tax and for company books. This table provides corporate taxable income by size as well as for corporations reporting taxable income or a loss for tax purposes. The current edition contains, for the first time, comparative data from the previous year, a review of major 1970 changes and detailed tax information for the integrated petroleum and natural gas industries.

The corporation section of a report to parliament, required by legislation, contains expanded analysis dealing with the tax position of foreign- and Canadian-controlled corporations as well as improved measures of corporation profits and detailed information on the composition of corporate assets.

The Industrial Corporation Section publishes a quarterly report entitled *Industrial Corporations Financial Statistics* which presents estimates of assets, liabilities, shareholders' equity, retained earnings, revenue, expenses and profits of corporations for 25 major groups in the non-financial industries. In 1972, revised questionnaires, requiring expanded detail from balance sheets and income statements, were introduced with the first publication to be released in July, 1973.

The financial institution Section's major series measures — by industry group — income and expenses, financial position and financial flows for most of the financial institutions and financial intermediaries operating in Canada. The questionnaires used for these series have been redesigned and are being initiated during 1973 to improve quality and measure a number of significant new activities. Plans to rebase the quarterly series on the 1971 corporate universe should be completed within a year.

These series are used by business and economic analysts and by macro-economists for developing monetary and fiscal policies. In addition, the data form part of the system of national accounts and are used in various economic models including gross national product and financial flows accounts.

A committee under the National Association of Credit Unions is reviewing both the questionnaire and the contents of the annual credit union publication. A revised questionnaire may result in 1973. The publication provides extensive financial data by province and other statistical and comparative data related to credit union activities.

The commercial failures (bankruptcy) series has also continued but mechanization aspirations have not been fulfilled.

The division has extended its coverage of the real estate industry with a new quarterly survey. In conjunction with several other federal government departments, the bureau has also embarked on a program to improve its financial data by province to provide provincial

● Business Finance Division ● Public Finance Division

This branch concentrates on a wide range of data dealing with the operations of business, industry and governments as well as on data related to construction and acquisition of real assets.

The Business Statistics Field is divided into industry statistics and general statistics. The Industry Statistics Branch is responsible for the development and co-ordination of statistics on manufacturing and primary industries, merchandise and services, agriculture, transportation and communications and construction. The General Statistics Branch is responsible for the development and co-ordination of statistics on external trade, prices, labour and business finance. The Business Register and Profiling Division is also part of this field and is attached to field headquarters. Its main responsibility is the development and maintenance of a central register of firms and their constituent establishments.

ments for purposes of statistical collections. In the recent reorganization, those divisions whose main function was the collection, processing and publication of statistics derived from business firms were grouped and became the Business Statistics Field. The functions of this field are:

1. To facilitate a uniform application of standards and concepts, and to co-ordinate the collection and editing of industry data;
2. To ensure that data collected are relevant, timely, reliable, consistent and compatible with other survey data; and
3. To see that the collection burden on respondents is minimized.

Business Finance Division¹

A new responsibility was added August 1 when the quarterly surveys of industrial corporations and financial institutions were transferred to this division. The division now is responsible for both the quarterly segment of the bureau's business finance statistical program and the annual segment, which is based on corporation income tax record data. The division is also responsible for collection, analysis and publication of data collected under authority of the Corporations and Labour Unions Returns Act. Information required of corporations by that act has two parts. The non-confidential section includes information on incorporation, officers, directors and ownership of the corporation's issued share capital. The confidential section includes financial statements and a schedule of selected payments to non-residents for dividends, interest and certain business services.

Labour unions are required to provide similar kinds of information. In the non-confidential section, information includes a copy of the constitution, names of officers, number of members and other information on locals, trusteeships and collective agreements. The confidential section of the return includes the union's financial statements and information on the dues and assessments received by

international unions from Canadian members. A major program for rationalizing the collection, processing, analysis and publication of corporation financial statistics was undertaken during 1972-73. This program was expected to yield significant improvements in the quality, timeliness and over-all usefulness of business finance statistics; to integrate several strands of business finance statistics; and to provide greater capability to meet individual statistical needs.

The sampling system used in the compilation of financial statistics was redesigned for the 1972 statistics year. The division is also taking advantage of data available from the Department of National Revenue which replace some financial data previously transcribed on a universe basis. Automating various phases of the division's operations continued during the year and procedures for computerizing the intercorporate ownership report will be started soon.

Near completion is a pilot project involving financial statements of 850 large corporations which is aimed at identifying and resolving problems relating to timeliness, differences in accounting practices, industrial classification and other quality considerations. The division has published the sixth of its series of annual reports — this one for 1970.

Corporation Taxation Statistics, 1970 edition, was also published. It deals with corporation, income tax, identifying the industry earning the income, the province in which it was earned and the size of the firm paying the taxes. A detailed reconciliation of company

1970 report. The 1969 edition included a statement providing additional information on integrated mining and smelting companies. This has been updated. A similar presentation has been included for the integrated petroleum and natural gas industries. Information on the impact of fiscal year changes as well as the impact of mergers and amalgamation has been provided. Tables for selected financial ratios for 182 industries, first published in 1969, have been updated and expanded to 15 from 11. Analytical commentary and a new table in the relationship between industry groupings, used in corporation financial statistics and the standard

of the May, 1971, study of place-to-place relationship between selected urban centres. Continuing the International Prices Section's support of the Canadian government's foreign service allowance system, full scale retail price and living costs surveys for 30 foreign cities were analysed. Eighteen others had abbreviated surveys. Results of previous comparative living cost studies were reviewed and updated as warranted in response to situations such as the U.S. dollar devaluation. A survey of shelter costs for military personnel serving in Europe was conducted and analysed. Officers of the section visited 16 European and Asian locations where Canadian government personnel are serving.

In the industrial prices field, publication of indexes of manufacturers' selling prices was continued for more than 100 industries with about 1,200 commodities of which 500 are published.

The general wholesale price index is being revised to base it on information derived from the 1961 input-output total.

The revised farm income price index now is published quarterly and work is under way on a revision to the Canadian farm products price index. The revision of the industry selling price index to a 1971 time and weight is also under way.

In the service industries group, development of price indexes of freight rates is in progress with investigation of data sources and negotiation to obtain data for design of weighting diagrams and price samples.

A number of new price indexes relating to the construction industry and capital expenditures were released in 1972-73. These are basic union wage rates for major construction trades; price indexes of forestry, machinery and equipment east of the Rockies; residential building construction input price indexes; and non-residential building construction input price indexes (a revision of the wage component only).

Development is continuing on the contractors selling price system of indexes, and the first results will be published in 1973-74. Also under development are price indexes on steam generating stations, and chemical and mineral processing plants.

Transportation and Communications Division²

This division, formerly the Transportation and Public Utilities Division, is responsible for statistics on the movement of goods, people and information in Canada and by Canadian carriers. Its five subject-matter sections control a broad range of surveys providing financial, operational, traffic and regulatory statistics relating to rail, road, water and air transport and telecommunications for bureau publications and other interested parties.

During the year, the division participated in studies initiated by the interdepartmental committee on transportation statistics which included representatives of the Ministry of Transport, the Canadian Transport Commission

mission, the Transportation Development Agency and Statistics Canada. Established to develop a comprehensive data base of transportation statistics, the committee explored existing transportation statistics uses and needs to establish the dimensions of the data base and to indicate priorities for new surveys and studies. Divisional project teams were modified and enlarged to contribute more to the committee.

Motor carrier surveys are being redesigned for effective coverage of each industry. An effort is being made to develop a more complete and well-defined universe for both passenger and goods carriers while design modifications to the newly-developed trucking origin-destination survey are under study to permit more precise stratification. New presentations of accident statistics will stress greater consistency and mileage will be more in line with the provincial records for easier reporting and better comparability.

Feasibility studies are under way to improve coverage of shipping statistics and to consider extension to the Mackenzie area. All financial reporting forms are under review to gain greater intermodal comparability and to reflect current technology and accounting practices.

The division, through Aviation Statistics Centre personnel, this year participated in negotiation of bilateral agreements with other countries concerning international scheduled air services.

Input-Output Division

The Input-Output Division is responsible for the development of annual input-output tables, which will also serve as benchmarks for annual values for production accounts within the Canadian System of National Accounts, and for coordinating the development of a consistent methodology for these accounts.

During 1972-73, the construction of the 1966 input-output tables was completed, and reconciliation with the Income and Expenditure Accounts was effected. Work advanced on the preparation of annual tables for the years 1962-65. Estimates and methodology for Personal Expenditure on Consumer Goods and Services were jointly developed by the Input-Output and the Gross National Product Divisions for the years 1947-69, with preliminary estimates for the years 1970 and 1971. A textual analysis of the Input-Output tables for the Atlantic Provinces was completed and made ready for printing.

¹ Labour Force Survey Section of the Labour Division
² Formerly Transportation and Public Utilities Division

The principal function of the Consumer Credit and Special Projects Section was publication of data on consumer credit and sales financing. It also carried out a major survey on household consumer through other than regular retail outlets. It includes home deliveries of newspapers, dairy products, bakery products, mail order sales of books, magazines, phonograph records, door-to-door sales of cosmetics, kitchenware, brushes, brooms, household cleaners and sales to consumers in manufac-

operational and several series published by anticipated that the entire program will be fully separate mail surveys will be undertaken. It is the remaining non-commercial service area, where prohibited under the Statistics Act. In groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

This division collects, compiles and publishes data on prices and consumer expenditure patterns and has three subject areas — retail prices and living costs, industrial prices and research. The first includes the measurement of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

The first non-commercial survey activity, which will commence in the second quarter of 1973, is based on the extraction of data from the Department of National Revenue files for reporting units which have a charitable number. A statistical report in 1973-74 will provide information on these units, except where prohibited under the Statistics Act. In the remaining non-commercial service area, separate mail surveys will be undertaken. It is anticipated that the entire program will be fully operational and several series published by 1975.

The Traveller Accommodation Report, following a reformatting of tables, is expected to be released in May, 1973, and the publication schedule for the 1972 traveller accommodation survey is being completed. Efforts were made to automate the survey with automated mailing and reception control procedures to be finalized during the first quarter of 1973. The editing, imputation and tabulation phases will be completed during the 1973-74 period.

The Non-commercial Services Section encompasses various religious organizations, labour organizations and trade associations, service clubs, fraternal organizations, political organizations, non-profit management and recreation services and all other non-commercial activities. Since its inception last September, the section has been involved in studies to formulate survey concepts and definitions and develop a survey program.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

Monthly inventory data of wholesale merchants were included for the first time in a new annual survey of diesel and natural gas engine sales for 1972 was undertaken with questionnaires mailed in March, 1973.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

Updating of the Canada and regional city methodology.

This division collects, compiles and publishes data on prices and consumer expenditure patterns and has three subject areas — retail prices and living costs, industrial prices and research. The first includes the measurement of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

This division collects, compiles and publishes data on prices and consumer expenditure patterns and has three subject areas — retail prices and living costs, industrial prices and research. The first includes the measurement of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

The first non-commercial survey activity, which will commence in the second quarter of 1973, is based on the extraction of data from the Department of National Revenue files for reporting units which have a charitable number. A statistical report in 1973-74 will provide information on these units, except where prohibited under the Statistics Act. In the remaining non-commercial service area, separate mail surveys will be undertaken. It is anticipated that the entire program will be fully operational and several series published by 1975.

The Non-commercial Services Section encompasses various religious organizations, labour organizations and trade associations, service clubs, fraternal organizations, political organizations, non-profit management and recreation services and all other non-commercial activities. Since its inception last September, the section has been involved in studies to formulate survey concepts and definitions and develop a survey program.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

Updating of the Canada and regional city methodology.

This division collects, compiles and publishes data on prices and consumer expenditure patterns and has three subject areas — retail prices and living costs, industrial prices and research. The first includes the measurement of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

This division collects, compiles and publishes data on prices and consumer expenditure patterns and has three subject areas — retail prices and living costs, industrial prices and research. The first includes the measurement of retail price movements and price differentials as they relate to changes and differences in the cost of living and real incomes of population groups within Canada and between Canada and other countries. Included also are family budget surveys and studies providing family expenditure statistics from various types of families. (Since February 1, 1973, family expenditure surveys have been carried out by the Consumer Income and Expenditure Division of the Household Statistics Branch.) Industrial prices cover measurements of price movements in the production and distribution of commodities and services. The primary focus is on prices of outputs and inputs of individual industries. Research groups co-ordinate research and analysis in prices and areas common to other subject areas including the treatment of quality change, analytical techniques and price index methodology.

The first non-commercial survey activity, which will commence in the second quarter of 1973, is based on the extraction of data from the Department of National Revenue files for reporting units which have a charitable number. A statistical report in 1973-74 will provide information on these units, except where prohibited under the Statistics Act. In the remaining non-commercial service area, separate mail surveys will be undertaken. It is anticipated that the entire program will be fully operational and several series published by 1975.

The Non-commercial Services Section encompasses various religious organizations, labour organizations and trade associations, service clubs, fraternal organizations, political organizations, non-profit management and recreation services and all other non-commercial activities. Since its inception last September, the section has been involved in studies to formulate survey concepts and definitions and develop a survey program.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

This section also discussed, with trade associations, Statistics Canada data to examine the usefulness of statistics produced and determine what kinds of information are needed.

During 1972-73, the Service Trade Section (Commercial Services) was heavily involved in:

1. Updating of its publication program;
2. Editing and tabulating data from the first survey of food-service franchising;
3. Planning for the 1972 survey of the computer service industry;
4. Automation of the traveller accommodation (formerly hotel) survey; and
5. Activities related to the 1971 census.

disturbance of goods and the provision of services from primary and secondary sources to the consumer. It also undertakes specialized research and assists users by providing special tabulations and by advising on published data. To better accomplish these objectives, two assistant directors were added and the division was reorganized into the sections: retail; wholesale; commercial; non-commercial; consumer credit and special projects; commodities and operating results; census section with primary planning and co-ordinating functions; research and development; use of taxation data; and central services.

Collection of returns from the 1971 Census of Merchandising and Service Businesses was nearly complete at March 31, 1973. In 1973-74, the last phase of the census — machine-edit imputation, tabulation of data, publication of reports — will be well under way. The 1971 Census holds the promise of providing more high-quality information than any other, through a computerized micro-base it now will be possible to meet almost all specialized requests (unless, of course, confidentiality is impaired). Data to be published — much on a provincial or small-area basis — include information on sales, employment, gross margins, operating expenses, non-trading income, sales by class of customer, form of organization, ownership size and sales by class of commodity.

During 1972-73, the Retail Trade Section continued its development of a new monthly retail trade sample survey to measure the sales of Canadian retailers. The transfer of administrative responsibility for mailing list updates from the Unemployment Insurance Commission to the Department of National Revenue necessitated major revisions and modifications to the program and, with testing under way, publication of the new survey results is expected to begin late in 1973. The delay resulted in plans to continue the old sample survey until the end of 1973.

A new monthly, *Merchandising Inventories*, was published to provide inventory information on chain stores, department stores, independent retail dealers and wholesale merchants. (This report was co-ordinated by the Consumer Credit and Special Projects Section of the division.) In addition, the annual shopping centre survey was expanded to include indoor shopping malls. Data from several metropolitan and major urban areas for 1972 will be reassured to determine the impact of this shopping facility on retailing. Publications released during the year included *Retail Chain Stores, 1970 and Shopping Centres in Canada, 1970*. The annual survey schedule resumed in 1973, following a complete revision of questionnaires.

The Wholesale Trade Section has undertaken a series of historical revisions to the data on wholesale merchants published between 1961 and 1971 and released them in July. As part of the 1971 census program, the section prepared detailed editing and tabulation

Canada and Statistics Canada for a joint water use survey by major industrial establishments. Considerable work was also done on formalization of the joint collection procedures with provincial statistical agencies, for the various industrial censuses.

A revised and strengthened survey design was introduced to the monthly shipments, inventories and orders survey in January, 1973, to provide greater reliability of monthly estimates of shipments by major groups of industries at the provincial level. Automation of the refined questionnaire survey has resulted in monthly data being produced two weeks earlier and annual data eight months earlier.

Although automation of the census of manufactures has not developed as quickly as anticipated, there have been encouraging developments in several modules. The master mail-out, check-in and follow-up file has been operative for three years and is being used more extensively than initially envisioned; and the computer-assisted photo composition module is expected to produce its first output in the summer of 1973. Development of the edit and imputation module for principal statistics has been delayed due to uncertainty of the format and content of the revised census of manufactures questionnaire, but there has been encouraging progress in automated processing of commodity statistics. In other developmental work, the Industrial Commodity Classification was completed and Volume I — the Classification is to be published in the spring of 1973. Relevant sections will be incorporated in all 1973 census of manufactures questionnaires and are being used as a basis for tables on domestic disappearance of the more significant manufactured commodities by integrating data on shipments, exports and imports. The first study in Canada of industrial differentiation in multi-industry manufacturing enterprises was published in the *Canadian Statistical Review*. An occasional paper on concentration in the manufacturing, mining and logging industries was almost ready for publication at year-end. Developmental work also proceeded on small-areas statistics with the main objective being the provision of non-standard groupings of geographic areas, especially through the application of geocoding techniques. On-the-job training, seminars, films and field trips and formal training sessions were emphasized during the year. Formal courses amounted to about 400 man-days while another 750 man-days were spent on language courses, primarily French. The division was also active in a wide range of committee and other liaison work with the public and private sectors in both Canada and abroad.

Merchandising and Services Division

This division collects, processes and publishes data on the retail, wholesale and service sectors.

Merchandising and Services Division

52. As a result, it is vital that historical consistency is maintained when tapping the potential of the existing survey to meet new data requirements. The revision project, therefore, is directed toward the development of an entirely new survey vehicle to meet data requirements and will permit linkage of the present and revised survey.

Preliminary planning has included an assessment of field operations in 1970 and a thorough study of concepts in 1971. In 1972-73, full-scale work was started, with emphasis on development of detailed plans for extension field tests and research projects to be undertaken in the next two years. Implementation of the revised survey is scheduled for 1976. A paper describing in detail the Labour Force Survey assessment and a revision project is available on request.

Manufacturing and Primary Industries Division

The division is responsible for statistics dealing with manufacturing, mining, forestry, fishing and energy, with survey and census data available in advance information, regular publications and special tabulations. Emphasis this year was on improving the coverage, quality and timeliness of data, reducing respondent burden, developing and applying new statistical techniques, automating surveys and training personnel.

New, or more readily accessible, statistical series were introduced, with one publication, *Detailed Energy Supply and Demand in Canada, 1958-1969*, so well received that it will become an annual. Service bulletins were extended to incorporate various special tabulations and previous non-catalogue publications. A new quarterly survey was introduced, providing data on shipments of office furniture products.

Expansion of existing surveys to provide more useful data has resulted in improvements in statistics of tobacco products and stocks, women's clothing and sales of pest control products.

Efforts to reduce respondent burden continued on Statistics Canada surveys and on those by other agencies where the data desired is either identical or similar to that already submitted to Statistics Canada. In the first instance, development work is still proceeding on using tax returns as a substitute for surveying small firms, particularly in the census of manufacturers. In the meantime, these respondents were given the option of submitting supporting financial statements with their 1972 census of manufacturers returns in lieu of supplying certain financial data.

Results of the 1971 revised census of manufacturers test questionnaire, designed in co-operation with the Canadian Institute of Chartered Accountants, are still being assessed and some additional refinements are necessary before implementation.

On the broader front, survey duplication by government agencies now is still avoided.

Manufacturing and Primary Industries Division

1952. As a result, it is vital that historical consistency is maintained when tapping the potential of the existing survey to meet new data requirements. The revision project, therefore, is directed toward the development of an entirely new survey vehicle to meet data requirements and will permit linkage of the present and revised survey.

Preliminary planning has included an assessment of field operations in 1970 and a thorough study of concepts in 1971. In 1972-73, full-scale work was started, with emphasis on development of detailed plans for extension of field tests and research projects to be undertaken in the next two years. Implementation of the revised survey is scheduled for 1976. A paper describing in detail the Labour Force Survey assessment and a revision project is available on request.

Labour Division

The division produces a broad and varied program of establishment and administrative statistics. Subject matter covers statistics of employment, labour income, employer labour costs, occupational employment and job vacancies, pension plans, data relating to the Unemployment Insurance Commission and the Department of Manpower and Immigration.

The pension section issued the first of a planned series entitled **Pension Plans in Canada** based on information from a data bank created with the co-operation of the Federal Department of Insurance and the provincial authorities of Quebec, Ontario, Saskatchewan and Alberta. In two months, two reprints were required to meet demand.

To help the Department of National Revenue (Taxation), the trustee pension survey accepted from employers as a supporting document for income tax returns. This eliminated the need for a special return.

In addition to producing monthly employment, earnings and man-hour data, the employment section conducts annual detailed labour cost surveys concerning the composition of the wage package and the cost of "fringe benefits". During the year, a report entitled **Labour Costs in Canada, Finance, Insurance and Real Estate**, was published while preliminary results of a survey of transportation, communication and other utilities were released. As part of a program directed at revealing detailed aspects of employment in particular industries, a new publication entitled **Earnings and Hours of Work in Canada—Retail Trade Industry** was released in September. It provides, for the first time, separate information concerning earnings and hours of work of men and women employed in retail trade.

A survey of labour costs in manufacturing and hours of work of men and women employed in retail trade.

During 1972, quarterly job vacancy survey results were published. The development of machine-readable output to expedite production of the publication and facilitate preparation of tabulations and meet the special requests expected to be operational about mid-1973.

Work on tabulation development of minimum hiring rates of pay was initiated with some ready for the summer of 1973. Adding this dimension to vacancy data will enhance the value of information for analytical purposes.

With the introduction of computerized claims payment by the Unemployment Insurance and Manpower Section has completed plans for processing claim documents. It will result in more efficient utilization of clerical resources and should make it possible to produce detailed and current information re-

Labour Force Survey Division

garding beneficiaries, their entitlement and large employers and about 54,000 small employers. All data will be collected by personal visit or telephone interview to keep non-response to a minimum. Adverse respondent reaction should also be reduced by assuring the employer he will not be interviewed more than once a year. Employers will be asked to report all employees for a given month by occupations, using appropriate job titles. Where employers have both a large number of employees and numerous job titles, sub-sampling within the reporting unit will be carried out. Many large firms were visited earlier to arrange for interviewers to have a complete employee list — by occupational title — when they con-

With financial support from the Canada Department of Labour, the division is continuing to work on a national program of work injury statistics. The aim is to utilize data filed with Workmen's Compensation Boards rather than obtain work injury reports. Following consultation with the U.S. Bureau of Labour Statistics, and in co-operation with the provincial workmen's compensation boards and safety organizations, a proposed standard format for tabulating work injuries involving time loss has been developed. This proposed format and underlying classification system is being discussed with the provincial boards.

A meeting of statisticians from Workmen's Compensation Boards from British Columbia, Nova Scotia and Alberta, with representation from some safety groups, was held at Statistics Canada this spring to review the proposed standard and to discuss mutual problems.

During the year, the Manpower Research and Development staff was involved in development work for the occupational employment staff. Senior professional staff also prepared background papers and served on inter-departmental committees concerned with project development in other bureau areas such as the post-censal Highly-Qualified Manpower Survey planned by the Census Division.

A start was made on a series of quarterly analysis of labour market behaviour as an input to a new program of current economic analysis. The second issue of **Notes on Labour Statistics** was issued, focusing on unemployment and women in the labour force.

Labour Force Survey Division

The section is concerned with the production and improvement of labour force data based on a monthly survey which serves two purposes:

1. It classifies people by their activity in a particular week each month to determine the employment and unemployment situation. (A great deal of descriptive information is also collected about the characteristics of those surveyed.)
2. It permits supplementary questions relating

Labour Force Survey Division

to matters of current interest. (Some illustrative data of the variety of information obtained include: multiple job-holding, summer employment experience with students, part-year and seasonal workers, citizenship and immigration and smoking habits.)

The survey sample has been designed to represent all persons 14 years of age or over residing in Canada. Exceptions are residents of the Yukon and the Northwest Territories, Indians living on reserves, inmates in institutions and members of the armed forces. The survey is carried out by more than 800 interviewers who interview persons from a sample of 32,000 households.

The details on the employment and unemployment situation in Canada are first published in a press release. More detailed information is in the monthly bulletin — **The Labour Force**. The bulletin also gives results of the supplementary questions which are useful to labour market analysts. Timeliness of published information derived from these surveys was greatly enhanced as data from six of the twelve supplementary surveys conducted during the year were published, including educational attainment, multiple job-holding and summer employment experience with students. This improved performance was partly due to the creation of a unit to co-ordinate the production and publication of supplementary surveys.

Data on other information available from the survey, such as articles on **The Unemployed By Industry and Occupation** and **The Unemployed Family Data**, have been published. The section also has an annual publication, **Seasonally Adjusted Labour Force Statistics**, which contains data from January, 1953, to the December of the current year. The data include selected series on the main labour force characteristics, including actual data, seasonally-adjusted data, and the factors used to seasonally adjust the series. A supplement is being published which will provide data on other frequently-requested labour force series.

Work was begun on a major new undertaking known as the Labour Force Survey Assessment and Revision project which will extend over the next three years and will cost \$8 million. To meet growing demands, it is designed to provide a major extension and expansion in the information collected and published throughout the Canadian labour force. Areas of particular interest are:

1. A demand for information giving a more sensitive picture of labour market complexities than is indicated by simple distinction between employment, unemployment, and non-labour force activities;
2. A demand for more information on the dynamic aspects of the labour force such as on the gross flows between labour force categories between successive months;
3. A demand for larger samples to provide more detailed data at the regional, provincial and sub-provincial level and to prevent finer levels of cross-classifications of estimates.

The Labour Force Survey, begun in 1945, has been conducted on a monthly basis since

The branch produces statistics relating to the major industrial sectors of the economy. Information is collected from establishments within trade records. In general, output of this branch tends to concentrate on data related to production or sales of commodities or services, material used, employment, prices, imports and exports.

- External Trade Division
- Labour Division
- Labour Force Survey Division
- Manufacturing and Primary Industries Division
- Merchandising and Services Division
- Prices Division
- Transportation and Communications Division
- Input-Output Division

External Trade Division

The division is responsible for compilation, analysis and dissemination of Canada's merchandise export and import statistics. The ongoing part of this program involves production of regular reports and special tabulations that provide trade data by commodity, by country, by province, by customs clearance for both exports and imports, by mode of transport and by region of lading for exports, and by tariff item for imports.

The Canada Customs Import Entry form has been redesigned and expanded, as Statistics Canada and the Department of National Revenue prepare for automation of customs procedures. A major change has been the transfer of responsibility from Statistics Canada to the importer for providing the numerical commodity code on the new import entry form.

The expanded classification provided by the new 16,000-item Canadian International Trade Classification (CITC) will facilitate customs control of imported goods and simplify administrative procedures in an automated system. The system is to be introduced in stages, starting with a pilot project in Montreal, adding Toronto six months later and becoming fully implemented by the end of 1975.

A program of field trips by commodity

officers, in co-operation with DNR Customs, is being continued to explain the commodity classification to brokers and importers. Furthermore, 20 CITC supplements have been prepared on an industry basis to assist importers and brokers importing particular goods. Another 30 of these supplements are being prepared.

Canada and United States counterpart trade statistics for 1970 were reconciled through a display and detailed analysis by computer of the two sets of data in terms of the Standard International Trade Classification (SITC), and against corresponding Canadian documents.

Current objectives are to reconcile 1971 and 1972 data.

Study of the 1970 data showed both countries overstated the imports value relative to counterpart exports by using values determined by customs administration rather than transaction values declared by reporting companies. Both countries also understated exports because reporting was incomplete. Other causes of discrepancies included inconsistent treatment of transportation charges and temporary imports as well as inconsistent conceptual frameworks for defining trade transactions.

In summary, the agreed figure for Canada's merchandise trade surplus was \$1.4 billion in contrast to the \$1 billion reported by Canada

clature (BTN). External trade officers participated in Customs Co-operation Council studies on the development of a harmonized commodity description and coding system for international trade and in a working group on a correlation of the Standard International Trade Classification (SITC) and the Brussels Tariff Nomenclature (BTN).

External trade officers participated in Customs Co-operation Council studies on the development of a harmonized commodity description and coding system for international trade and in a working group on a correlation of the Standard International Trade Classification (SITC) and the Brussels Tariff Nomenclature (BTN).

A special questionnaire survey, undertaken jointly with the Balance of Payments Division to obtain 1971 information on pricing and reporting practices of Canadian exporters and importers, was processed. It was known before this survey that some Canadian commodities such as grain, coal and newsprint were not being reported on customs entries, f.o.b., at point of production. The survey confirmed that while two-thirds of the export value was reported f.o.b. port of exit, one-sixth was reported at delivered cost. Of the reported imports, 86 per cent was declared f.o.b. foreign plant, seven per cent foreign port of consign-Canada. These findings will contribute to improvement of estimated shipping receipts and payments of the Canadian balance of international payments.

management scheme and associated manipulation and report-generating software. The objectives of the system are to provide rapid, interactive access to the latest statistical information; to replace user resources now devoted to ledger maintenance and reporting activities; to free professional resources for research and analysis; and to provide a more sophisticated analysis of current economic conditions.

The continuing publication program of the monthly Canadian Statistical Review and its various supplements is another function of this division.

During the year, four studies were completed: Economic Returns to Education in Canada, Determinants of the Participation Rate of Married Women in the Canadian Labour Force; An Econometric Analysis, A Composite of a Time Series is an Algebra of Averages and Pay Worker Reconciliation: 1972 Study.

The Gross National Products Division is responsible for the preparation and publication of the quarterly, annual and historical National Income and Expenditure Accounts. It includes Gross National Income, Gross National Product and Gross National Expenditure Aggregates (the latter on both current and constant dollars basis) and Personal Income, with its components on a national and provincial basis. The division is also involved in research, development and analytical activities.

Gross National Products Division²

The Gross National Products Division publishes the quarterly, annual and historical National Income and Expenditure Accounts. It includes Gross National Income, Gross National Product and Gross National Expenditure Aggregates (the latter on both current and constant dollars basis) and Personal Income, with its components on a national and provincial basis. The division is also involved in research, development and analytical activities.

Revisions for 1968 to 1971 were published in the September, 1972, annual supplement to the monthly publication, *Indexes of Real Domestic Product by Industry*. At the end of the fiscal year, a more substantial revision was nearing completion. This revision, planned for release in the 1973 annual supplement, will contain revisions back to 1961.

The division also publishes annually current dollar value added for goods-producing industries by province. Latest data — for 1970 — are contained in the *Survey of Production*, 1970 report released in January, 1973, which also contains historical tables for the period 1926 to 1970.

The second stage embodied additional — but not as major — statistical revisions. It took into account the 1966 Census of Merchandising and Services results as well as new and annual data for several components. Improved methodology was introduced to several major series for annual and quarterly estimates back in 1947.

In July, 1972, the Division made available to users a reproduction of the computer print-out showing the historical revision of quarterly National Income Expenditure Accounts for 1947 to 1971. In September, a bulletin was prepared as a partial release of the historical revision of Annual National Income and Expenditure Accounts. This contained only the geographical distribution of personal income and its main components for 1926 to 1971. In November, a complete set of Annual National Income and Expenditure Accounts was made available. It contained: summary tables, sector tables, industrial distribution and gross domestic product, distribution of personal income.

1 Formerly Econometric Research Staff and General Time Series Staff

2 Formerly National Income and Expenditures Division

3 Formerly National Output and Productivity Division

Part 1 : The data~producing groups

Economic accounts branch

- Balance of Payments and Financial Flows Division
- Current Economic Analysis Division
- Gross National Product Division
- Industry Product Division

This branch is primarily responsible for principal statements and indicators relating to the economy. Its activities touch all of Statistics Canada's output and other data, providing integrated macro-economic data for the use of economists and others concerned with the course of the economy.

Balance of Payments and Financial Flows Division

The division is responsible for the construction, analysis and publication of statistics and reports relating to these areas of the economy :

- Estimates of balance of payments covering current and capital transactions between Canada and other countries;
- Canada's international investment position measuring the country's external assets and liabilities;
- The financial flow accounts which integrate the financial activities of the Canadian economy into a single statistical framework and record the flow of funds between various sectors; and
- International travel statistics covering both Canadians travelling abroad and non-resident visitors to Canada.

Quarterly reports of the balance of payments and the financial flow accounts, monthly reports on sales and purchases of securities between Canada and other countries as well as monthly and annual reports covering travel between Canada and other countries were published. Available principal series of international investment and foreign ownership and control of Canadian industry were published. A comprehensive report of Canadian

balance of payments for 1965 to 1970 was published. Special sections include the results of a survey of international payments and receipts for business services and selected Canada - United States relationships as they affected the balance of payments.

Joint Canadian - U.S. studies enabled statisticians to publish a 1970 reconciliation, in broad terms, of the bilateral Canada - U.S. current account of the balance of payments statistics. Before, the bilateral accounts prepared by each country showed a considerable unexplained difference.

Third quarter 1972 financial flow accounts were produced on the fully-automated data processing and assembly system for the first time. Advance release and key figures became part of the regular production program. Sources and methods of the compilation of statistics for five sectors of the economy contained in the financial flow accounts were published.

An attempt to improve international travel statistics between Canada and other countries resulted in a pilot project of a new questionnaire and survey techniques at Dorval airport. Test results, which will be available in 1973, will likely influence future programs in this area. The section undertook more field and liaison work with customs port administration

A continuing function is the development and management of CANSIM and of a computerized economic intelligence system. This system will consist of information data based on what is in the most demand for current policy-making and analysis plus a file-

The division is undertaking research and development projects relating to: methodological investigations for estimating various economic and other aggregates; model building and estimating for improved timeliness and efficiency of various series produced by Statistics Canada; project-oriented analytical research; and seasonal adjustment work and other smoothing techniques for time-series analysis. The division also provides consultative services in the application of econometric and related techniques and works with other agency research groups.

Current Economic Analysis Division¹

Senior divisional staff represented Canada in meetings of the UN, OECD and IMF on international travel statistics, financial statistics and balance of payments data. The International Travel Section also participated in the Federal-Provincial Conference on Tourism held in Ottawa in October, 1972.

to foster co-operation in joint statistical projects.

Statistics Canada was reorganized in 1973 to make the agency a more responsive and effective central source of statistical information. The reorganization was based on extensive study following Parliament's approval, in 1971, of a new Statistics Act changing the agency's name to Statistics Canada from Dominion Bureau of Statistics, the name it has had since its formation in 1918.

Under the changes, six Assistant Chief Statisticians and two Directors-General were named to head the areas of key responsibility in the new organization. They report directly to the Chief Statistician of Canada and, with her, form the bureau's executive committee.

Here is a summary of the new responsibilities:

Business Statistics: Produces statistical information on prices, labour, foreign trade, agriculture, transportation and communications, construction, manufacturing and primary industries, and service industries.

Household and Institutional Statistics: Produces statistics on health and welfare, crime, education, science, culture, government finance, consumer income and expenditure, and employment and unemployment; develops new social statistics.

Economic Accounts and Integration: Operates

the Canadian system of national accounts (including GNP and the balance of payments) and produces statistics on production, and foreign ownership and control; develops industrial input-output tables, current economic analysis, statistical integration, and research on urban and small-area statistics.

Statistical Services: Supports data-collection and compilation operations, including survey processing.

Marketing Services: Promotes awareness and use of statistical information.

Census: Conducts the quinquennial and decennial censuses and publishes resulting demographic information.

Administration Branch: Manages production-scheduling, financial control, and personnel administration.

Policy, Planning and Evaluation Branch: Responsible for strategic and medium-term planning, program forecasting and evaluations, and advising on statistical priorities.

17	Field Division
17	Health and Welfare Division
18	Judicial Division
18	User Advisory Services
Part 2: The Central Management and Service Groups	
20	Integration and development staffs
20	Business Register and Profiling Division
21	Consultant on Demographic Research
21	Regional and Urban Research and Development Division
21	Office of the Senior Advisor on Integration
23	Methodology and systems branch
23	Computer Systems Development Division
23	Business Survey Methods Staff
23	Census and Institutional Survey Methods Staff
24	Household Surveys Development Staff
25	Information services
26	Information Division
26	Library
26	Year Book Division
27	Administration branch
27	Financial and Administrative Services
28	Production Planning and Scheduling Division
28	Personnel Administration
28	Data Processing Division

Table of contents

The Honourable Alastair Gillespie, P.C.,
Minister of Industry, Trade and Commerce,
Ottawa, Canada.

Sir:

It is with pleasure that I submit to you the
Annual Report of Statistics Canada covering
the operations and services during the fiscal
year ended March 31, 1973.

Respectfully submitted,

Agnes Ostry

Chief Statistician of Canada

Part 1: The Data-Producing Groups

Introduction 4

Economic accounts branch 5

● Balance of Payments and Financial Flows Division 5

● Current Economic Analysis Division 5

● Gross National Product Division 5

● Industry Product Division 6

Economic statistics branch 7

● External Trade Division 7

● Labour Division 7

● Labour Force Survey Division 8

● Manufacturing and Primary Industries Division 8

● Merchandising and Services Division 9

● Prices Division 9

● Transportation and Communications Division 10

● Input-Output Division 11

Financial statistics branch 12

● Business Finance Division 12

● Public Finance Division 13

Socio-economic statistics branch 14

● Agriculture Division 14

● Census Field 15

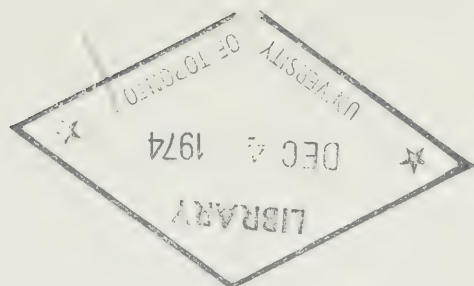
● Consumer Income and Expenditure Division 16

● Education, Science and Culture Division 16

1972-73
Annual Report
of
Statistics Canada

For the fiscal year ended March 31
1-0000-502
Catalogue 11-201
December 1973
Information Canada,
Ottawa

*Canada, Statistics Canada
Report*





1972-73

Annual Report

For the fiscal year ended March 31



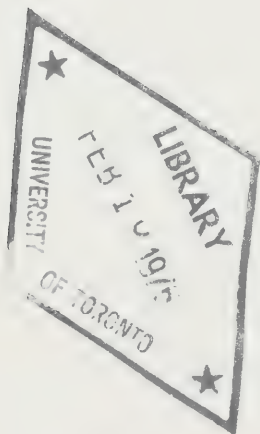
Statistics
Canada

Statistique
Canada

1973-1974 Annual report

For the fiscal year ended March 31





1973-1974 Annual report

For the fiscal year ended March 31

1-0000-502
Catalogue 11-201
Information Canada
Ottawa

Table of contents

4	Introduction
5	Policy Planning and Evaluation Branch <ul style="list-style-type: none">• Strategic Planning• Planning Operations• Planning Evaluation
6	Administration Branch <ul style="list-style-type: none">• Production, Planning and Scheduling• Financial and Administrative Services
7	<ul style="list-style-type: none">• Personnel Administration• Official Languages
8	Business Statistics Field <ul style="list-style-type: none">• Business Register and Profiling
9	Industry Statistics Branch <ul style="list-style-type: none">• Agriculture
10	<ul style="list-style-type: none">• Manufacturing and Primary Industries• Transportation and Communications• Merchandising and Services
11	<ul style="list-style-type: none">• Construction
12	General Statistics Branch <ul style="list-style-type: none">• External Trade• Prices
13	<ul style="list-style-type: none">• Business Finance• Labour
15	Economic Accounts and Integration Field <ul style="list-style-type: none">• Co-ordinator, Financial Statistics• Senior Advisor on Integration
16	System of National Accounts (Current) Branch <ul style="list-style-type: none">• Gross National Product• Industry Product• Balance of Payments
17	<ul style="list-style-type: none">• Financial Flows and Multinational Enterprises• Current Economic Analysis
18	System of National Accounts (Structural) Branch <ul style="list-style-type: none">• Standards• Input-Output• Regional and Urban Research and Development• Structural Analysis

-
- 20 Household and Institutional Statistics Field**
Household Statistics Branch
- Labour Force Survey
- 21**
- Consumer Income and Expenditure
 - Special Surveys Co-ordination
- 22** Institutional and Public Finance Statistics Branch
- Public Finance
 - Education, Science and Culture
- 23**
- Health
- 24**
- Judicial
- 25 Statistical Services Field**
- Household Surveys Development
- 26**
- Business Survey Methods
- 27**
- Census and Institutional Survey Methods
- 28**
- Field
- 30** Systems and Data Processing Branch
- Automation Research, Planning and Audit
 - Data Processing
 - General Survey Systems
 - Systems Development
- 32 Marketing Services Field**
- Information
 - Library
 - User Advisory Services
- 34 Census Field**
- User Relations Co-ordinator
 - Administrative Co-ordinator
- 35** Content and Analysis Branch
- Census Long-Range Planning
 - Population Estimates and Projections
 - Census Characteristics
- 36**
- Census of Agriculture
- 37** Census Production Branch
- Data Capture
 - Census Data Processing
 - Data Dissemination

Introduction

The Honourable Alastair Gillespie, P.C.,
Minister of Industry, Trade and Commerce,
Ottawa, Ontario.

Sir:

It is with pleasure that I submit to you the
Annual Report of Statistics Canada covering
the operations and services during the fiscal
year ended March 31, 1974.

Respectfully submitted,

Sylvia Ostry

Chief Statistician of Canada.

Statistics Canada was reorganized to make the agency a more responsive and effective central source of statistical information just prior to the start of this fiscal year. It resulted in a major realignment of some duties and, in some cases, creation of new divisions to meet the increasing demands being placed upon the nation's central statistical agency. This report reflects the first year's operations with this new organization.

Policy planning and evaluation branch

The Policy, Planning and Evaluation Branch is responsible for strategic and medium-term planning, program forecasting and evaluating, and for advising on statistical priorities. It was created in 1973 and consists of the Strategic Planning, Program Evaluation and Planning Operations Divisions. These divisions devoted the early parts of 1973-74 to detailed development of their roles, the specification of programme plans and the acquisition of staff.

D. A. Worton, Director General

- Strategic Planning
- Planning Operations
- Program Evaluation

The Strategic Planning Division

This division co-ordinates medium-term plans for major subject-matter fields and synthesizes these into over-all bureau plans. Its first major planning exercise was in conjunction with the Household and Institutional Statistics Field and related subject-matter areas, including Census. This task, which will extend into 1975-76, related to the development of a medium-term plan for social and related socio-economic statistics.

efficiency and effectiveness of the bureau's ongoing programme. Near the end of the year, it began identifying the many hundreds of the bureau's statistical projects as a basis for its studies of efficiency and effectiveness at a level of detail consistent with the management information system referred to above.

The Planning Operations Division

This division is responsible for the department's information system, entitled the Progress Reporting and Cost Accounting System (P.R.A.C.A.S.) and is trying to integrate it more fully into the planning process. Work began on the development of a new project proposal system for implementation in 1974-75. This system will eventually be the means of translating the immediate needs of medium-term plans into specific proposals for the department's annual programme forecast. As well, work on a new Committee Coordination system was started towards the end of the fiscal year.

The Program Evaluation Division

This division is responsible for evaluating the

Administration

The administration branch manages production-scheduling, financial control and personnel administration.

G. Labossière, Director General

- **Production Planning and Scheduling**
- **Financial and Administrative Services**
- **Personnel Administration**
- **Advisor on Official Languages**

Production, Planning and Scheduling

The division was established in 1972 with the basic responsibility for improving the timeliness of bureau publications. It was to be accomplished through long-range planning to facilitate a balance of workload; through short-range scheduling and monitoring to ensure that timeliness objectives and priority requirements are met; and through improvement studies to promote the most effective use of production facilities.

Following a thorough review of the division's mandate, action started on the long-range planning phase. During 1973-74, a Production Planning Section was established and, in conjunction with subject matter divisions, quantified the production requirements of all bureau outputs and published a two-year production plan. This plan now is used to measure bureau performance in terms of output predictability and production efficiency.

In support of the Division's activities, the Development Section undertook a series of studies to produce and test a priority algorithm which is intended to assist management decision-making under peak load conditions while recognizing the complex inter-relationships of the different series.

Production capacity, process, and cost

studies were also completed to lay the foundation for a scheduling system.

Financial and Administrative Services

This division consists of Financial Services, Production Services, Records Management and Accommodation Services

Financial Services

This section has two main functions, one concerned with the financial operations, including examination and control of expenditures, auditing claims and commercial accounts, interpreting financial regulations and providing advice to line managers. The second involves the sale and distribution of Statistics Canada publications.

During 1973-74, an automated book-keeping machine was installed to help keep abreast of increasing demands and to handle new programmes such as an internal commitment system and perpetual inventory control.

Revolving fund operations increased to 242 projects and \$3,306,000 in 1973-74 from 170 projects and \$1,394,000 in 1972-73.

During the year, the Publications Distribution Unit handled an increased volume of publications-related mail. The addressograph plate mailing list increased to 284,000 from 270,000 plates.

The Production Services Section provides bureau-wide service in materiel management, duplicating printing, forms managements, addressographing, mailing, typing and transcribing. During the year, 6,383 invoices were processed with a value of \$2,978,476.61. Forms Management converted all departmental forms to new cost centre accounting codes that were introduced by Financial Services.

Assistance was given in preparing FOSDIC documents for the 1975 census.

In the Addressograph Unit, 16,039,123 forms were addressed, 115,519 plates were embossed, 146,164 plates were corrected and 172,621 plates were deleted. Total number of pieces of mail inserted was 5,738,738. A total of 21,481 bags of mail were sent to the Post Office and 8,604 were received. During the year, 57,809 pieces were examined for cash, cheques and money orders sent as publication payments. Total amount recorded by postage meters was \$372,267.32.

Typing and Transcribing Services were provided by five units, one in each of five locations in Ottawa.

The use of "word processing equipment" to improve and expedite general typing is available in three typing units. Input terminals are being used for many publications and manuals.

In Scheduling and Liaison, approximately

12,000 pages of manuscript were processed for printing. All publications released during the fiscal year, regardless of composition method, were examined for correctness prior to printing.

The Records Management Services Section established a capability to assess all bureau proposals for microfilming records, or to obtain microfilm equipment. Another function is to retain an equipment inventory to ensure compatibility and maximum utilization. During the year the Dominion Archivist was asked for permission to convert more than 200 reels of computer magnetic tape and more than 3 million individual items to microfilm. Also, 1,228 cubic feet of records were transferred to the Government Records Centre for storage and 6,845 cubic feet of obsolete records were destroyed.

At the year's end, Accommodation Services was responsible for 850,000 square feet of office and storage space. The major activity was directed at the interior layouts of the new R.H. Coats Building, working with the Department of Public Works. The concept of open planning was adopted and a new style of work-station furniture was developed. Planning started for another building and for refurbishing the Statistics Canada building which will provide, when complete, 1,300,000 square feet of office space in an interconnecting complex. Telephone service increased by nine per cent but additional use of intercoms has reduced the expansion rate.

Personnel Administration

As part of a programme to decentralize personnel services and activities, five field personnel units have been established since 1973. Each unit has been located with, and assigned responsibility for providing a full range of personnel administration services to, one or more operational areas within the bureau.

The units have been staffed primarily through a transfer of personnel from the centralized sections. Current plans envisage a continuing reduction in the operational role of the central personnel section as these activities are gradually assumed by the field units. The central personnel unit will then become primarily concerned with departmental personnel policy and the evaluation programs.

Staffing

A total of 1,087 continuing employees — including 136 statisticians or economists — were hired during the year. In addition, 915 term employees were hired. During the same period, 1,847 employees left Statistics Canada including 619 continuous and 1,228 casual and term employees. That figure included 68 statisticians or economists.

There were 4,384 continuing employees on staff at the end of the year plus 754 term and casual employees.

During the summer of 1973, 188 students were employed — 21 as graduate research assistants and the balance in a clerical capacity.

There were 324 closed competitions during the year, 33 interdepartmental and 182 selections through other processes — Data Stream and inventory searches. In the regional offices, 33 closed competitions were held. A total of 766 employees were promoted by other processes of selection making a total of 1,134 promotions. There were also 28 open competitions conducted — two at Head Office and 26 in the regional offices. There were 28 appeals with 22 registered in closed competitions and six against promotion by Data Stream or Inventory Search. Of these seven were allowed, four were withdrawn and one is still outstanding.

Training

More than 2,300 Statistics Canada employees undertook training during the year with the proportion of female to male employees being almost equal.

The bulk of training courses attended — involving nearly 2,000 persons — were conducted "in-house". These included computer systems, statistics, mathematics, accounting, telephone usage, effective writing, sampling theory, job evaluation, supervision, first aid, management, project team management, and retirement planning.

More than 200 employees received language training with the Public Service Commission Language Bureau and 70 employees were undergoing language training within Statistics Canada.

At the end of the fiscal year, seven employees were on educational leave undertaking courses leading to masters or doctorate degrees.

The utilization of the Audio Visual Resources Centre has shown a steady increase during the year with some 26 programs, consisting of about 90 video tapes, produced during the year.

Classification

Statistics Canada has authority to classify approximately 96 per cent of positions in the bureau. Senior positions and some groups with government-wide application remain the responsibility of Treasury Board.

The bureau has classification advisors identified for each Field to help carry out the classification role for all but the small group that remain under Treasury Board jurisdiction.

To maintain high quality classification decisions and improve line management's knowledge of the classification system, six courses in job evaluation were given during the fiscal year and are expected to continue.

Personnel Services

The Personnel Services unit, which includes the departmental pay service, has been reorganized in line with the decentralization program.

Statistics Canada and the Official Languages

According to the guidelines adopted in the

House of Commons and promulgated by the Treasury Board, Statistics Canada identified the particular language requirements of some 4,400 permanent positions. Having carried out this study, the Bureau started to analyze the language proficiency of the employees in connection with the requirements of the positions and to plan activities in order to correct deficiencies.

Of the permanent positions identified, 1,690 required the knowledge of both official languages. Bilingual employees actually fill one third of these positions. As for employees in the other bilingual positions, they will have to acquire fluency in French and in English by the end of 1978.

On the other hand, total staff of this agency comprises 1,448 bilingual employees, i.e. who passed the second language skill test and satisfied to the standard established for their occupational group. Along with these employees, 208 others are now in language training and bilingual candidates are in the process of being hired. All this will facilitate the development of institutional bilingualism in Statistics Canada.

Furthermore, the language system of the *Unités de langue française*, which use French as the major communication language, enables the employees of these task forces to work in French within the Civil Service, while providing members of other work units with the opportunity to use their knowledge of this language. Thus, civil servants concerned may develop at home some kind of individual bilingualism.

As of March 31, 1974, all periodical publications of Statistics Canada were available in bilingual format.

Business Statistics

This field produces statistical information on prices, labour, foreign trade, agriculture, transportation and communications, construction, manufacturing and primary industries and service industries.

V. R. Berlinguette, Assistant Chief Statistician

- **Business Register and Profiling**
- **Industry Statistics Branch**
- **General Statistics Branch**

Business Register and Profiling Division

The Business Register and Profiling Division consists of three sub-divisions: Tax Record Access, Profiling and Business Register.

Business Register Sub-Division has been developing a Business Register for several years but its place in the survey-taking operations of the bureau was first marked formally in June, 1973, by a policy statement by the chief statistician. It is being extended to include all Canadian corporations. Concurrent with this, developmental work for the use of "Divisional Master Files" in survey-taking has been under way. The first two will be in Labour Division and Merchandising and Services Division and hopefully will be operational by the end of 1974. The Business Register computer system is being upgraded to use modern data-base management techniques. Work is also continuing on the development of sophisticated clerical and computer procedures and the introduction of a formal co-ordinating operation.

Tax Record Access Sub-Division's objective is to develop systems and procedures which will retrieve data from income tax records to supplement or replace statistical data collected in other ways. Part of this year's efforts were directed at developing a system by which

unincorporated businesses were identified and related to specific industries. Strict security measures had to be established and maintained for Statistics Canada processing of documents without interrupting normal processing of the tax returns by the Department of National Revenue.

The systems developed herald the start of a three-to-four-year project to identify the unincorporated sector of the economy which will accomplish two goals:

- (a) Provide a basis for the 1976 Census of Merchandising and Services; and
- (b) Reduce the respondent burden.

The Profiling Sub-Division has continued to work on reference profiling of all large and complex businesses in Canadian industry. This involves identifying a business in terms of its legal structure and the analysis of it in terms of operating and accounting structures. The analysis finally forms the basis of the firm's statistical reporting structure. The profile is then recorded on the business register and numbered to provide a computer identity for survey purposes.

The Sub-Division works closely with the Business Statistics Field both in profiling individual businesses sent forward as profile requests and in industry reviews. Each industry review includes basic research into the concepts

and definitions in the industry itself, followed by profiling of all of its large and complex firms. Industries studied are computer services, pulp and paper, wood products and petroleum. Preliminary work has been carried out in the banking and financial services industries and under review is the transportation services field.

The Sub-Division is also participating in survey review work being carried out by Labour Division and for the Census of Merchandising and Services.

Industry statistics branch

- Agriculture Division
- Manufacturing and Primary Industries Division
- Transportation and Communications Division
- Merchandising and Services Division
- Construction Division

Agriculture Division

The Agriculture Division is responsible for a statistical system designed to collect, evaluate and regularly publish information concerning the agricultural industry. The program is conducted in co-operation with provincial government departments through joint participation in some surveys and by other arrangements. Co-operation is also maintained with federal departments and agencies, especially Agriculture Canada.

A new enumerative sample survey, consisting of about 6,000 farmers, was implemented in 1972 to obtain basic information on crop acreages, livestock numbers, farm inventories of grain, farm numbers and income from farm and off-farm sources. The survey was extended to 8,000 farms for 1973 and 1974 and will be increased again to 9,000 farms in 1975. The survey is designed to provide annual benchmarks — replacing five-year benchmarks — for statistical estimates derived from data collected in mail surveys. This survey is still in the developmental stage but should be operational by 1976.

The Crops Section deals with field and horticultural crops with much of the data collected by mail surveys of farm correspondents. Information is published on acre-

ages, growing conditions, yields, crop production, stocks of grain and prices received by farms. Allied with these surveys are those of the grain milling and oilseed crushing industries.

Data from these farm surveys are integrated with statistics emanating from the operations of the Canadian Wheat Board, the Canadian Grain Commission, trade groups and several government departments to provide continuous studies of the supply, movements and trade of Canadian cereals, feed grains and oilseeds. An agriculture reporting program on world trade in grain and oilseed crops is maintained through the co-operation of the Canadian Trade Commissioner Service.

Recommendations emanating from special meetings on horticultural statistics were assessed with respect to possibility and practicability and these findings were referred to the Canadian Horticultural Council.

Surveys for objective measurement of fruit production in the Niagara region of Ontario were conducted. The data were entered into the processing system through a computer terminal in St. Catharines. This processing method permitted instant experimentation with the survey data and problem analysis while the survey was in progress.

Work was initiated on a new sampling system for the objective measurement surveys,

using a block area sample instead of a list frame. The initial enumeration was carried out in October and teams of enumerators will be sent to Niagara in June and July to complete the work. Partial funding came from the fruit industry.

During the year, the predominant activity in the Marketing Statistics Unit was development of comprehensive data on the feed grain-livestock sector.

The Livestock and Animal Products Section provides statistical information on the Canadian livestock industry through publication of data pertaining to production and disposition of milk and manufactured milk products, cattle and calves, pigs, sheep (including wool), poultry, eggs and furs.

The Section participated in the analysis of The Agriculture Enumerative Survey results. Hopefully, further results can be used to generate national estimates for livestock numbers.

A study to develop an alternative method of estimating total milk production, was undertaken jointly with Quebec, Ontario and the Canadian Dairy Commission in 1972 and extended to include the other provinces in 1973-74. Research on the home consumption of milk resulted in the revision of this series for the years 1966 to 1971.

Liaison between the section and the survey methods staff continued in order to improve sampling techniques for surveys on poultry and eggs, swine, and milk production. New methods developed will be more appropriate for coping with consolidation and specialization which is occurring in agriculture. The section participated in a Project 75 Task Force Committee organized to investigate the beef information system and recommend improvements.

The Farm Income and Prices Section is responsible for statistics on financial aspects of the farm sector including production of statistical series measuring farm income, expenditures, prices, capital investment, land values and wage rates.

In addition, the section became involved in two other projects. The first was the forecasting of income and expenditures for the Agriculture Canada Outlook Conference. With volatile economic conditions and instability in all sectors of the economy, the section devoted considerable resources in an attempt to supply reasonably-reliable predictions of farm income.

After an examination of income tax returns, the section produced many series measuring farmers' income from agriculture and other sources. The basic data allowed tabulations for sub-provincial regions and for types of farms. The initial presentation of these new series was made during the 1974 annual Federal-Provincial Conference on Agricultural Statistics.

Development of the Farm Register system continued throughout the year, with the Systems Development Division providing the analysis and programming input. A flexible and inexpensive retrieval system now is in operation. Through the use of user-prepared control cards, this set of programmes will select records, create tape files and produce lists and labels that are specified by the user. A sampling program was also developed to provide a choice of several sampling methods. It operates in conjunction with the retrieval system to select samples from active farmers for either one-time or continuing surveys. An update system was also developed during the year. When implemented, it will provide for updating the farm status, name, address and the response records for farmers reporting to all mail surveys conducted by the Agriculture Division. During the review year, survey mailing lists were converted from addressograph plates to computer addressing. The section now has responsibility for the selection, maintenance and updating of all such mailing lists and for the production of labels and lists for these surveys.

The Semi-Annual Survey of Crops and Livestock was revised during the year. While there were no major developments in processing the survey results, refinements were made to the system. Quality control received more attention and additional audit counts were added. Tabulations showing structural change between surveys were produced for the first time and have proven useful to the statisticians.

The Special Projects Section acquired an expanded role in the systems development and data processing of the Agriculture Enumerative Survey to include responsibility for the computer production runs and the technical input required for research studies.

During the year, the division converted copy preparation of two publications from typing to Alphatext and the Special Projects Section was given responsibility for developing methods of automating the preparation of publication manuscripts.

Manufacturing and Primary Industries Division

The Division's major responsibility is the production of information on manufacturing, mining, forestry, fishing and energy. Emphasis continued during the year on improving quality of data, reducing respondent burden, and automating surveys.

The 1973 energy crisis has a significant impact in three main areas: a substantial increase in special tabulations, demands for earlier release of data and requirements for finer statistical detail.

A pilot project to use taxation records as a source of data for small firms, rather than directly surveying them, has yielded encouraging results. The ultimate goal is to exempt such firms from having to report in the annual Census of Manufactures.

Co-operative arrangements with federal and provincial government departments and agencies, designed to eliminate duplication in collection and to improve the usefulness of statistics, were strengthened and extended. A typical example of the latter was the establishment of the Inter-departmental Task Force on an Information System for the Apparel and Textile Industries which developed a system to produce monthly data on apparent Canadian markets for textile, clothing and footwear items at a much finer level of detail than was previously available.

A revision of the commodity sections of the annual Census of Manufactures questionnaires was completed, with the implementation of the Industrial Commodity Classification in all 1973 forms. The Classification itself was published in May under the title, *Industrial Commodity Classification Manual (No. 12-541)* and will be used as the basis for data in *Products Shipped by Canadian Manufacturers (No. 31-211)* and for a new report on the apparent domestic availability of selected manufactured commodities.

Among the benefits of those phases of the Division's automation programme already completed is the availability of all publishable data in machine-readable form. The next, and most complex, phase of the automation programme is editing, imputation and multi-purpose retrieval which will be implemented progressively.

Monthly estimates of manufacturers' shipments by industry group were first published at the provincial level in the March 1974 issue of

Inventories, Shipments and Orders in Manufacturing Industries. This survey is now based on the 1970 Standard Industrial Classification, which provides for comparability in coverage and definition with annual Census of Manufactures data.

An occasional paper, *Industrial Organization and Concentration in the Manufacturing, Mining and Logging Industries*, using 1965 and 1968 data, was published and work was begun on a similar report for 1970. Analysis of domestic and foreign control of manufacturing establishments in Canada, based on 1970 Census of Manufactures data, was also undertaken. The results, covering both national and regional aspects of domestic and foreign control, are to be published jointly with the Business Finance Division.

Transportation and Communications Division

This division monitors the business of moving goods, persons and information in, from and to Canada, and associated governmental activities. Its surveys provide detailed financial, operational, traffic and regulatory statistics relating to transportation and telecommunications for bureau publications and for in-depth study for government.

A comprehensive review of motor carrier and other road-related statistics has resulted in a more complete motor carrier universe and the establishment of a new basis for surveys and publications. With Transport Canada and others, the division developed an accident data bank called TRAID (Traffic Accident Information Data System) — based with Transport Canada — which makes available consistent and complete national traffic accident data.

An interdepartment committee, spearheaded by the division, has developed an integrated approach to analyzing shipping statistics and a sub-committee has recommended the redefinition of the survey universe of the Canadian shipping industry.

The Aviation Statistics Centre collaborated with Transport Canada to develop an Automated Data Interchange System for reporting, via telecommunication networks, of aircraft movements at Transport Canada tower-controlled airports. The programme, from data collection to publication, is automated.

Through this division, Statistics Canada is a partner with other federal agencies in negotiations on which commercial international air transport agreements are based.

A fully-automated monthly survey on radio broadcasting time sales was introduced in January in response to growing demand.

Merchandising and Services Division

This division collects, processes and publishes data relating to: 1. the distribution of goods and services in the retail, wholesale, and service sectors of the economy, 2. the areas of sales financing, consumer credit, direct selling, auto-

matic vending machines and non-commercial organizations.

During 1973-74, timeliness of annual publications was improved with most surveys published within 12 months of the reporting year.

The processing of data collected during 1972-73 for the 1971 Census of Merchandising and Services continued. Planning also commenced for future Censuses of Merchandising and Services.

It will be based on a Divisional Master File — now being created — rather than on field enumeration.

The monthly Retail Trade Survey has been redesigned and will go into operation in 1975. This survey will include a more detailed breakdown of kinds of business and, in addition to provincial data, metropolitan area data will be published for Montreal, Toronto, Winnipeg and Vancouver.

The annual Shopping Centre Survey has been enlarged and now includes ancillary shopping centres — downtown shopping malls — as well as consolidated data for metropolitan and major urban areas to supplement provincial data.

The Wholesale Trade Section conducted a new census-type survey of wholesale merchants for 1973, results of which will be published during 1975. A similar survey for other types of wholesale business is planned for 1975. These surveys then will be conducted in alternate years and the results used to adjust monthly data generated in the regular sample surveys.

Results of the first annual survey of Diesel and Natural Gas Engine Sales were published in 1972.

The Service Trade Section published its first report on the computer service industry — a report that was received with interest by both the trade and the press.

During 1973-74, planning was done for a three-phase survey programme among hotel operators on occupancy rates. A pilot study was conducted.

The monthly Consumer Credit Publication has been expanded to include personal cash loans issued by trust and mortgage loan companies.

A new annual statistical survey was launched on vending machine sales and imports.

One of the important innovations in the work of this division concerns non-commercial organizations. During the year, charitable, fraternal and trade organizations statistics were collected for the first time.

All data on charitable organizations (defined by Revenue Canada) were obtained from administrative records to avoid respondent burden. Data for trade and fraternal organizations were collected via questionnaires. These data are to be published in 1975.

Construction Division

The Construction Division produces comprehensive measures of construction, investment and related activities.

In recent years, the method used to measure the value of new residential construction has been improved, utilizing starts and completions data for four types of dwelling units: single, double, row and apartment. Time and work patterns have been developed for each type, by region and by month of start.

This year, a computer system was developed to perform the extensive calculations involved in estimating the value of housing construction. This system, which introduced changes currently taking place in time and work patterns, valuation and changes in type of structure, provides detailed monthly housing construction measures by province. The work patterns emerging from the system are useful in valuating housing construction and the timing of this work in relation to the pressures on supply of labour and materials. Eventually, it will be possible to assess work patterns by geographic area, month of start, size of structure and period in the economic cycle.

The application of work patterns in the housing valuation process will be useful in the development of a system for non-residential construction valuation which now is under way.

Estimating continued for capital and repair expenditures on construction and on machinery and equipment in all industries and all provinces. Separate estimates for the Yukon and Northwest Territories were compiled for publication for the first time in April, 1973. These measurements are produced quarterly as developments and expenditures progress from the planning stage to the actual capital spending. Semi-annual reports are published.

Estimates according to private and public ownership by province were also initiated for release in 1974-75. In the continuing review of universe and sample coverage, a re-examination of the motor transport industry was started in co-operation with the Transportation and Communications Division.

Negotiations were initiated with provincial statistical offices to undertake joint surveys on capital and repair expenditures. All provincial capitals were visited to review provincial needs and joint survey arrangements are being considered with Quebec, British Columbia, Nova Scotia and Saskatchewan. Other provinces are also expected to initiate joint surveys.

The annual estimates of capital stocks and flows and related estimates of fixed non-residential capital in Canada have been updated and stored on CANSIM. The data are now available for the period 1926-1973. A new annual publication, *Fixed Capital Flows and Stocks (Cat. No. 13-211)*, has been approved and efforts have been devoted to automating phases leading to publication. The first, expected in May, 1974, will also be the first of its kind produced by CAIS (CANSIM ALPHA-TEXT INTERFACE SYSTEM). It involves a completely automated publication technique on this cycle: Data on tape — transferred to CANSIM — to — CAIS — to — Publication.

An encouraging pilot study on examining

the feasibility of the estimation of alternative measures has been carried out. These measures will be based on different techniques for both depreciation and gross stocks. For some industries, alternative measures are already available.

In our endeavour to analyse critically the behaviour of our capital stock series, an economic indicator of capacity utilization for the manufacturing sector was created. It is hoped that this series will soon be published.

In response to growing demand, some efforts toward producing regional statistics have been made and some preliminary data may soon be available.

The Census of the Construction Industry has been extended to include the Non-residential General Building Contracting Industry, the Residential General Contracting Industry and the Special Trade Contracting Industry.

During the year, an additional 58,000 construction contractors were contacted to determine their type of business and status. In addition to the identification of 65,000 active construction contractors, an automated system of mailing and file maintenance has been developed to process efficiently information.

General statistics branch

- External Trade Division
- Prices Division
- Business Finance Division
- Labour Division

External Trade Division

The Division's principal objective is to publish statistics on Canada's merchandise imports and exports classified by country of origin or destination and by kind of commodity. The statistics are based on import and export declarations filed with Revenue Canada (Customs and Excise) at Customs ports throughout Canada. The Division's bulletins show, as additional information, the Canadian province of Customs clearance and in the case of exports, the mode of transport and the Canadian region of lading.

In 1974, several of the more important developments reflected the Division's involvement with statistical agencies in other countries or in international organizations. The joint United States-Canada programme to reconcile the two countries' bilateral trade statistics was extended to include the publication of agreed quarterly estimates. Work on the U.S.-Canada 1973 statistics led up to their final reconciliation at the turn of the year. The United Nations Statistical Commission, was informed by the U.N. Statistical Office of the impact of the joint United States-Canada studies and was invited to sponsor a study of discrepancies in trade statistics on the basis of the North American methodology.

The Division's Trade Measures Section was

engaged in methodological work on export and import prices, one result of which was an analytical paper submitted to the Conference of European Statisticians of the U.N.'s Economic Commission for Europe.

The Division also supported, through the involvement of its commodity specialists, the work of the Brussels-based Customs Co-operation Council on an internationally agreed harmonized commodity code for use in trade and transportation statistics.

The Division continued to provide Revenue Canada with support in implementing the automated imports clearance programme. One aspect of this was to create nine field units, stationed at major Customs ports to monitor the quality of commodity coding by brokers and importers. A technical assistance was also provided in determining the relationships of the Canadian Tariff to the Brussels Tariff Nomenclature.

Prices Division

Prices Division collects, compiles and publishes data on prices at all levels of economic activity and is divided into three subject areas — retail prices and living costs, industrial prices, and research and development. In the first group are the measurement of retail price movements and differentials as they relate to changes and

differences in consumer prices in Canada and between Canada and other countries. Industrial price movements relate to the production and distribution of commodities and services. The research and development group co-ordinates research and analysis in areas common to retail and industrial prices.

The programme of updating the consumer price indexes has been completed with new weights, reflecting 1967 family expenditure patterns. Publication of the reweighted index started in May, 1973.

Collection of retail prices was increased in the Maritime cities, including Charlottetown and Summerside, where a feasibility study of producing a consumer price index for a smaller centre is nearing completion. Another study, aimed at publishing retail prices for approximately 50 supermarket food items in 14 Canadian cities, was completed and results released.

The first in a series of updated place-to-place consumer price relationship studies, published on a component-by-component basis, was released. Four components have been published: tobacco and alcohol as of May 1973; health and personal care as of August 1973; transportation as of October 1973; and recreation, education and reading as of December 1973.

In continuation of support of the Canadian Government system of allowances for federal employees, indexes for 79 isolated posts were produced after surveys were conducted in the Eastern Arctic, Northern Quebec, Labrador, Eastern Quebec and the MacKenzie district of the Northwest Territories.

The International Prices Section conducted 36 full-scale and 13 abbreviated retail price and living cost surveys for the Canadian foreign service allowance system. Officers visited 16 foreign posts in the Middle East, East Africa and Western Europe.

New indexes were released on construction output and capital expenditures related to basic union wage rates and indexes including selected pay supplements. These were published for 12 trades and 14 cities. A new quarterly price index was released for the construction of chemical and mineral processing plants.

Development continues in the contractors' selling price system of indexes. Surveys are under way for plumbing, electrical systems, masonry, acoustic tile, flooring, plastering and drywall.

In the service industries group, development work continued on price indexes for transportation with emphasis on the bus industries, including school buses. A survey was conducted to obtain weights for a legal price index and work was undertaken to produce a price index of goods and services purchased by Ontario hospitals. With Health and Welfare Canada, the Division is working on a price index of physicians' fees.

The feasibility of producing retail price indexes by store type is being investigated.

In the industrial prices field, publication of indexes of manufacturers' selling prices was continued for 101 industries and for 453 commodities in manufacturing industries. Another 608 commodity price indexes are available upon request.

The general wholesale price index weighting is being updated and the item and respondent content is being upgraded. Work is under way on a revision of the Canadian farm products price index and the industry selling price index.

The revised farm input price index now is published on a continuing basis quarterly.

Business Finance Division

The division collects, analyses and publishes financial and taxation statistics of corporations and administers the Corporations and Labour Unions Returns Act (CALURA).

During 1973-74, the division's structure was streamlined to facilitate integration of quarterly and annual financial series and to improve publication quality and timeliness. The new organization will permit a more orderly integration of the financial statistics series and will result in more effective collection and follow-up procedures, especially of CALURA information.

The two-part CALURA Report, Part I — Corporations, 1971; and Part II — Labour

Unions, 1971, was tabled in parliament.

In addition, work progressed on a new series — a balance sheet and income and retained earnings as well as a source and application of funds which is to be included in the 1972 corporations report.

Work continued on the *Inter-Corporate Ownership* publication, which has 1972 data. It is to be released in late 1974. Development work is progressing on an automated system to tabulate the 1973 and subsequent years' data in publication form.

Corporation Taxation Statistics, 1971 edition, was published during the year and contained a number of improvements over earlier reports. Tables reconciling book profit to taxable income were changed to provide a more logical presentation of items involved in the determination of corporate income taxes. The analysis was extended on the relationship of income taxes to taxable income, and of income taxes to book profit on an industry basis. It also included detailed analysis of the significance of exempt income along with exploration and development expenses in Canada's mineral resources industries.

Corporation Financial Statistics, 1971 edition was in preparation at the end of the fiscal year. It provides more detailed financial data and, for the first time, information on government-owned corporations.

A revised annual sample has been selected and will be used to make estimates for production of annual publications for 1972.

The Industrial Corporations Section publishes quarterly reports entitled *Industrial Corporations, Financial Statistics* which present estimates of assets, liabilities, shareholders' equity, retained earnings, revenue and expenses, and profits of corporations for 25 major categories in the non-financial industry. These series are available on CANSIM.

The Financial Institutions Section publishes data — similar to industrial corporations data — for most financial institutions and financial intermediaries operating in Canada. Other reports are published on: commercial failures, by industry and by province; cheques cashed, by major cities and by type of account; and credit unions, by province.

New individual-industry questionnaires were introduced this year, improving the measurement and detail of financial activities and quality of data.

These series are used by economic analysts and by macro-economists in government, business and universities. In addition, data are used in published models including Gross National Product and Financial Flows.

A new corporation universe base from 1971 has been compiled for selecting by computer, a new quarterly sample.

Labour Division

The Labour Division is concerned with statistics of employment, labour income, employer labour cost, occupational employment and job

vacancies, pension plans and data relating to the operations of the Unemployment Insurance Commission and Canada Manpower Centres.

This year, production of the monthly report on employment, payrolls and manhours was converted to Alphatext. In addition to possibly shortening production time, Alphatext provides a more flexible and readable type-face for both text and tables.

An occasional publication, *Estimates of Employees by Province and Industry 1961-1972 (Cat. No. 72-513)*, was issued. It provides revisions of data that had been carried in a publication suspended in 1971. It also provides new data for the March, 1971, to December, 1972, period.

An occupational employment survey, initiated in 1973, will provide detailed occupation data by industry not presently available except from the decennial census. This data will fill a gap in information concerning shifts in the occupational composition of the work force resulting from changes in technology, industrial growth patterns and other factors. The survey output will be used in decision-making on manpower training, vocational guidance and for general labour market analysis.

Annual averages of minimum hiring rates associated with job vacancies were constructed with the objective of developing hiring rates, by occupation, industry, province and census metropolitan areas.

An index of job openings based on newspaper help-wanted advertisements was taken over by Statistics Canada from the Department of Finance this year. It provides regional data but this is available in a consistent series back to 1962.

A conference of provincial Workmen's Compensation Board officials was organized by the Labour Division to discuss development of a national work injury statistics program. A Steering Committee of Provincial Workmen's Compensation Board representatives and safety associations was formed to assist Statistics Canada in the development of a program. The Steering Committee's first meeting is scheduled for fall, 1974.

The pensions data bank created with the co-operation of provincial authorities of Quebec, Ontario, Saskatchewan, Alberta, and the federal Department of Insurance, has provided a wide range of information to participating agencies and the interested public. To supplement information available from the four provincial agencies, a survey of firms with pension plans in the remaining provinces was conducted in 1973 with results to be published in *Pension Plans in Canada (Cat. No. 74-401)*.

A quarterly report, *Quarterly Survey of Trusteed Pension Plans (Cat. No. 74-001)*, was initiated in 1973 to provide information on the size and investment pattern of pension funds. Pension plans now are accumulating funds at more than \$1 billion a year and are a major source of investment capital.

Much of the Manpower Research and De-

velopment Staff's activity this year focussed on investigating administrative records for statistical purposes. This included a study of payroll data from taxation files and an analysis of the characteristics of the unemployed from unemployment insurance records. Research studies, now being prepared, include: Patterns of Job Search among Canadian Workers, Employment Experience of Younger Workers, and Older Males in the Canadian Labour Force.

A divisional project is development of a long-range statistical program on employment, hours and earnings. One objective is to make the division more responsive to current user needs such as the requirement for small area data and better data for small firms. A second objective is to improve the ability to accommodate changing payroll practices.

Economic Accounts and Integration

This Field consists of the System of National Accounts (Current), and the System of National Accounts (Structural), the Senior Advisor on Integration and the Co-ordinator of Financial Statistics. The Current Accounts Branch is responsible for production, analysis and dissemination of the System of National Accounts — with the exception of Input-Output Tables — and for current economic analysis. The Structural Accounts Branch is responsible for benchmark estimates, for structural economic model development and operation — including the Input-Output Tables — and for the development of standard classification systems necessary to the integration of bureau-wide activities. The Field is the final internal user of the bureau's economic statistical output and is responsible for the development of standard classification systems and structural research.

P.G. Kirkham, Assistant Chief Statistician

- **Co-ordinator, Financial Statistics**
- **Senior Advisor on Integration**
- **System of National Accounts (Current)**
- **System of National Accounts (Structural)**

Co-ordinator, Financial Statistics

In co-operation with the provincial officials, available information on mortgages is being expanded by the tabulation of records of mortgage registrations. Discussions have taken place with all provinces and several now are producing information.

The Co-ordinator of Financial Statistics has prepared a report for the Secretariat of the Interdepartmental Committee on Computer/Communications covering the statistical needs of users of computer communications and the problems involved.

Senior Advisor on Integration

Under the supervision of the Senior Advisor on Integration, the substantive work on a compendium of social statistics was completed. The staff completed a pilot project on urban environmental indicators dealing with transportation and access to recreation in the Ottawa area. A preliminary investigation of the feasibility of a net welfare measure was made, and a paper reviewing possible extensions to the GNP was prepared.

Also through this office, Statistics Canada is directing an interdepartmental committee that will plan and monitor the development of environmental data.

System of national accounts (current)

- Gross National Product Division
- Industry Product Division
- Balance of Payments Division
- Financial Flows and Multinational Enterprises Division
- Current Economic Analysis Division

Gross National Product Division

This division is responsible for the preparation and dissemination of the quarterly, annual and historical National Income and Expenditure Accounts which include National Income, Gross National Product and Gross National Expenditures Aggregates (in both current and constant dollars) for the four main sectors of the economy. The division is also involved in continuing developmental and analytical activities.

A Federal-Provincial agreement in May resulted in the division undertaking a research programme aimed at estimating the provincial distribution of total Canadian Gross Domestic Product. Problems of concepts, methodology and data sources are being reviewed jointly with provincial statistical agencies and representatives of other federal departments. Considerable progress has been made in estimating the distribution of the main aggregates and preliminary results may be released by mid-1975.

An up-dated version of the National Income and Expenditure Accounts reference document was completed and its translation was begun. It incorporates all changes in concepts, methodology and sources introduced into the Accounts since 1956 and should be available in the latter part of 1975.

Industry Product Division

The Industry Product Division publishes monthly, quarterly and annual indexes of real domestic product for the economy as a whole, and for a number of individual industries. More than 120 production series are published each month, including aggregates of total manufacturing, retail trade and transportation.

In July, 1973, an annual supplement to the monthly *Indexes of Real Domestic Product by Industry* was released. This supplement contained annual revisions from 1961 and brought the real domestic product measures into closer agreement with the constant price gross national product series. The quarterly and monthly indexes were also revised from 1968 forward.

The division also published annual current dollar value-added for goods-producing industries by province and territory. These data for the years 1926 to 1971 are contained in the *Survey of Production, 1971* released in December, 1973.

Divisional staff participated in developing real output and productivity measures for non-commercial industries, and presented papers on it to various conferences.

Balance of Payments Division

This division is responsible for the construction,

analysis and dissemination of data related to:

- (a) Estimates of balance of payments covering capital and current transactions between Canada and other countries; and
- (b) Canada's international investment position, its external assets and liabilities.

Among the special events during the year were: the publication of the survey results on international licensing agreements, the reconciliation of 1971 and 1972 Canada-United States current account Balance of Payments statistics published in March 1974 and the introduction, in the annual *Canadian Balance of International Payments*, of new sections covering the definitions and contents of the accounts and a calendar of Balance of Payments-related occurrences.

A report on Canada's international investment position was partially completed with selected sections released in the *Statistics Canada Daily*. In addition, projections of control ratios for major segments of Canadian industry, based on known changes of control in major companies, were released for 1971, 1972 and 1973.

Consultative assistance to the International Monetary Fund in the revision of its Balance of Payments Manual was also provided.

Financial Flows and Multinational Enterprises

This division compiles, analyses and disseminates three sets of economic statistics. The first relates to financial flows in Canada and is based on a system designed to integrate the flow of funds between various lending and borrowing sectors. The second covers estimates of international travel between Canada and all other countries, including the number and characteristics of travellers. The third involves improvement of the statistical base necessary for examining the structure and activities of multinational enterprises.

A revised historical series of financial flow accounts for the period 1962 to 1969 was released through CANSIM. As part of a continuing program, descriptions of the sources and methods of the compilation of financial flow accounts for four sectors of the economy were published. Plans were made to survey international travellers at Toronto's Malton Airport and at major Ontario border crossing points to test existing survey methods and alternative means of data collection.

The Multinational Enterprise Section, formed in mid-year, initiated a study of integrated data requirements for empirical analysis and policy decisions relating to multinational enterprises. Because of user demand, work was concentrated on foreign-controlled concerns in Canada. A feasibility study on construction of a statistical series on foreign takeovers in the Canadian economy has also been undertaken.

Current Economic Analysis Division

This division is involved in research and development projects related to the development of methodologies for estimating various economic aggregates; model-building and estimating for improved timeliness and efficiency of various Statistics Canada series; project-oriented analytical research; and seasonal adjustment and other smoothing techniques for time-series analysis. The division also provides in-house consultative services in the application of econometric and related techniques.

During the year, the Econometrics Section concentrated its research efforts on the construction of an econometric model of the Canadian economy. A prototype became operational in February and provides a continuing research input into the Gross National Product Division.

The EIS Section is developing an Economic Intelligence Service to provide rapid and interactive access to the latest statistical information, and an analysis of current economic conditions. It also is responsible for the development and management of CANSIM (Canadian Socio-economic Information Management System). Since the introduction of CANSIM, persons with minimal knowledge of computers can retrieve and analyse time series data stored in it.

During the year, development of a CANSIM

Alphatext Interface System (CAIS) by the General Time Series Section makes possible the automated production of regularly-occurring publications using the CANSIM data base.

The Seasonal Adjustment Unit of the General Time Series Section has studied the Labour Force seasonally-adjusted series and provides consultative services.

System of national accounts (structural)

- Standards Division
- Input-Output Division
- Regional and Urban R&D
- Structural Analysis & Productivity Research Division

Standards Division

The responsibility of Standards Division is to control classifications and concepts for the bureau and consists of about 25 persons, mainly professional and technical personnel. The division participated in a bureau-wide effort to improve data documentation, did preliminary work on the impact of metrication and contributed to the work of an Inter-departmental Committee on the coding and classification of financial transactions of the federal government.

Work continued on the standard classification of occupations, commodities, industries and services and on a Standard Geographical Classification.

Occupational Classification

The occupational classification unit provided consultative and support services to those responsible for the occupational data derived from the 1971 Census, occupational coding associated with the post-censal Highly Qualified Manpower Survey and the Occupation Employment Survey. Discussions started with the Department of Manpower and Immigration on revisions to the Canadian Classification and Dictionary of Occupations to identify differences between this classification and the Oc-

cupational Classification Manual used for the '71 Census. It will hopefully strengthen the Canadian Classification and Dictionary of Occupations.

Commodity Classification

Work continued on the development of volumes II and III of the revised Standard Commodity Classification. The classification by Principal Commodity Groups was transferred from the Input-Output Division and the process of reconciling this classification with the Standard Commodity Classification will determine the form of volumes II and III of the revised classification.

Standard Geographical Classification

Preparations continue for publication of the first edition of the Standard Geographical Classification, now expected in the fall of 1974.

Classification of Services

A second draft of the classification was distributed for comment from which a final version of the services classification is expected.

Input-Output Division

The Input-Output Division is responsible for the development of annual input-output tables,

for the benchmark project which is intended to provide fully integrated final revision to the production accounts within the System of National Accounts, and now, for measuring labour productivity in the commercial industries and in some subsidiary industry aggregations.

During the year, annual input-output tables for 1962-66 were completed and the division prepared to resume production of *Aggregate Productivity Measures*. Revised data for 1946-72 will be published in August, 1974.

Regional and Urban Research and Development Division

The programme of this division focuses on development of methodologies to provide a range of socio-economic data on a regional basis with major emphasis this year on completion of a model to estimate subprovincial population movements in Canada.

The staff continued work on projects aimed at the development of regional employment and unemployment measures and the utilization of various administrative data for statistical purposes.

Structural Analysis Division

This new division has assumed responsibility for

the development and operation of structural models of the Canadian economy.

By March, 1974, an output determination (or input-output) model and the price model were operational. Others were being developed and the following have undergone adaptations:

- 1) an input-output model with variable supply patterns;
- 2) a price model that allows users to alter assumptions about cost-push inflation and changing product prices;
- 3) a balanced trade model which subjects the calculation of activity levels and imports to balance of trade constraints;
- 4) an interregional input-output model;
- 5) a linear programming version of the 1966 input-output model.

Some analytic projects are being undertaken to improve the knowledge of data base and model properties. These include a comparative study of the 1961 and 1966 input-output tables and models; a study of the effects of aggregation in input-output models; a comparative study of the impact of investment expenditures in the Canadian economy; and a study of fabrication chains.

Household and Institutional Statistics

Household statistics branch

This field produces census and other demographic information as well as statistics on health and welfare, crime, education, science, culture, government finance, consumer income and expenditure, and employment and unemployment, and develops new social statistics.

Through its two branches, this Field is responsible for providing a wide range of current socio-economic information on individuals, families and households and the institutions that serve them. The education, health, employment, income and criminality of the Canadian population are some of the subjects on which this Field's programmes provide extensive information. While the greater part of its activities are on continuing programmes, an increasing number of special household surveys sponsored by other federal government departments and agencies are being carried out to meet their information requirements. The Special Surveys Co-ordination Division is reviewing and contributing to the survey activities of federal government departments by administering a Treasury Board directive requiring such a review.

L. E. Rowebottom, Assistant Chief Statistician

- Household Statistics Branch
- Institutional and Public Finance Statistics Branch

Labour Force Survey Division

This division publishes monthly and annual reports on labour force, employment and unemployment participation rates in a variety of cross-tabulations. During the year a number of new data series were introduced.

In the monthly publications these include:

- Seasonally-adjusted industry data;
- Occupational data coded according to the Canadian Classification and Dictionary of Occupations;
- Actual and seasonally-adjusted provincial data;
- Monthly family data on the unemployed;
- Data on the duration of unemployment — by age, sex and also by marital status and sex;
- Data on full-time and part-time employment — by age, sex and also by marital status and sex.

The series in the annual publication have also been increased with the addition of seasonally-adjusted data for 15 industry groupings and the actual and seasonally-adjusted data for the provinces from 1966 to 1973. Data for 15-to-19-year-olds and 15-to-24-year-olds also were introduced.

Another development was the implementa-

tion of an automatic update system for CANSIM, which allowed the number of series in CANSIM to be expanded from 1,000 to 3,000 providing mostly regional and provincial data.

In addition to conducting the current survey, the division is undertaking a major revision and expansion of the survey. The primary objective is to meet the demands for new and more comprehensive labour market data, including:

- (1) Demands for new types of information to give a more complete picture of the complexities of current labour market situation (more precise identification of groups who are on the borderline between employed, unemployed and not in the labour force, methods and intensity of job search activities and multiple job holdings).
- (2) Demands for new information on the dynamic aspects of the labour force (flows between various labour force categories from month-to-month or longer-run longitudinal information of persons during the six months respondents are included in the survey).
- (3) Demands for a larger sample to produce more reliable data at the provincial and sub-provincial level and for more detailed cross-classifications.

The revised survey is to be implemented in 1976. The first monthly test for it started in October after more than a year of intensive preparation. This test was designed for the developing and testing of new collection and data processing techniques. The new system encompasses almost all facets of the data collection and processing cycle in the survey, from the initial sample selection of households through to the final tabulation of survey data. It utilizes mini-computers in each regional office with telecommunication links between the regional offices and Ottawa.

Considerable attention was focussed on consultation with data users to determine their data requirements. After several months of bilateral discussions, a three-day conference was held. The discussions and the conference enabled the division to identify the preferences of data users with respect to the survey content. It contributed greatly to the development of the revised monthly questionnaire.

At the same time, project and research staffs undertook specialized studies related to concepts, content, survey techniques and quality control. The results are to be incorporated in the final design and operation of the new survey.

The sample frame of the Labour Force Survey is redesigned after each decennial census

to take into account demographic changes and the current redesign is nearing completion.

Consumer Income and Expenditure Division

The division is responsible for three continuing household survey programmes and for research in related areas.

The Household Facilities and Equipment Survey was conducted in 1973, collecting data from about 30,000 households on different aspects of housing, equipment and facilities available to households. The report, *Household Facilities and Equipment, (No. 64-202)*, was published in November.

The Survey of Consumer Finances is taken each year to obtain information on income and socio-economic characteristics of families in private households. Special supplementary questions are added on a rotating basis.

During 1973, a special report (No. 13-553), *Statistics on Low Income in Canada, 1969* was published, based on the 1970 Consumer Finance Survey. Further analysis of the asset/debt data will continue and a collection of special papers is scheduled for publication.

Three reports were published from the 1972 SCF data: *Income Distribution by Size in Canada, 1971, (13-207)*; *Family Incomes, Census Families, 1971, (13-208)*; *Incomes of Unemployed Individuals and Their Families, 1971, (13-552)*. One report represented special analysis of persons who reported some unemployment during 1971, the effect of their unemployment on their income and on that of their families.

From the 1973 SCF a preliminary report — *Income Distributions by Size in Canada, Preliminary Estimates, 1972* — was published and others are planned. A special analysis on work history data is to examine the relationship of earnings to the length of work experience and other socio-economic characteristics.

The 1974 Survey of Consumer Finances on 30,000 households will represent the largest sample base since 1972.

The publishing program from the 1970 Family Expenditure Survey continued and a third — of four volumes — was published in April, *Family Expenditure in Canada, 1969, Volume III, Major Urban Centres, (62-537)*.

The report *Urban Family Expenditure on Shelter and Household Durables, 1971, (62-540)*, was published in January, giving results of the partial budget recall survey based on 1971 expenditures.

During April, field work was completed on the 1972 Family Expenditure Survey covering St. John's, Halifax, Montreal, Ottawa, Toronto, Winnipeg, Edmonton, and Vancouver. Approximately 3,600 usable schedules were collected in these eight cities. A supplementary sample of households was interviewed in Whitehorse and Yellowknife and it was the first attempt to collect family expenditure data in the territories. The low response rate is being reviewed in planning future surveys.

The Family Food Expenditure Survey, 1974, originally planned on a small scale, was extended to cover 14 cities and included a special additional sample of low income households. An open-book diary is being used to record the expenditure, quantity and where the item was purchased.

Field work started in January and will continue throughout 1974. It is hoped that the expanded sample will provide data suitable for analysing changes in food expenditure patterns since 1969, particularly for the low income population.

A variety of research activities, were carried out. Low-income cut-offs, were re-examined using the 1969 Family Expenditure data. A revision was recommended. A report on revised estimates of total money income and employment incomes for countries and census divisions, 1966-1969, was prepared for publication.

In May, staff members presented two papers at the Conference on the Computer in Economic and Social Measurement sponsored by the National Bureau of Economic Research. One dealt with the creation of a synthetic data set by linking records of the Survey of Consumer Finances and the Family Expenditure Survey 1970; the other described the Canadian experience with recall and diary methods in consumer expenditure surveys.

Special Surveys Co-ordination Division

The Special Survey Co-ordination Division was established to manage new and ad hoc household surveys, to act as the focal point for special survey work requested by outside agencies, and to administer a Treasury Board regulation requiring that departments and agencies report new survey work to Statistics Canada (the "Ten Respondent Rule").

It brought together responsibilities for the management of household surveys which had been scattered in a number of divisions. Specifically, it was given responsibility for monthly surveys conducted as supplements to the Labour Force Survey. During 1973-74, a full programme of supplementary surveys was carried out ranging from 12 small surveys — on topics such as student labour force behaviour in the summer months, smoking habits, and travel to work patterns — through to larger studies of occupational mobility, child care, and the characteristics of pre-retirement males. Many of these surveys were externally sponsored while others were part of Statistics Canada's internal survey programme.

In addition to these supplementary surveys, the division handled independent surveys for the Secretary of State department, Department of Finance, and Central Mortgage and Housing Corporation. The work of CMHC involved development work on a large survey of housing units, the first phase of which is scheduled for collection in late 1974. Work for the Secretary of State department involved developing a pilot Time-Use Survey. Responsibility for this proj-

ect was later transferred to Statistics Canada and development work started late in 1973-74.

The main development in 1973-74 in co-ordinating surveys outside Statistics Canada consisted of a major revision to the Treasury Board's Ten Respondent Rule. Now mainly concerned with duplication, a revised circular would extend its objectives to: (1) establishing whether the need for new information can be met from existing information; (2) ensuring that new surveys are designed and carried out in conformance with appropriate statistical standards, that burden on respondents is minimized, and the usefulness of the data is maximized; and (3) ensuring that the necessary inter-departmental co-ordination occurs during the planning and that the resulting information is made available, subject to relevant confidentiality constraints.

Institutional and public finance statistics branch

- Public Finance Division
- Education, Science and Culture Division
- Health Division
- Judicial Division

Public Finance Division

One of the principal new undertakings of the division during 1973-74 was its participation in the development of standard accounts classification frameworks for government financial transactions. The division also played an active role on the Federal Interdepartmental Committee on the Classification and Coding of federal revenue, expenditure, asset and liability transactions and on an OECD Committee working toward an international standard classification framework for government expenditures.

The publication *Federal Government Finance* was expanded to include estimates of revenue and expenditure for the next succeeding year.

Development work was done on a quarterly financial management statistical series for government with the view to publication in 1974-75.

A survey designed to identify the local government entities and their interrelationships was started for the major metropolitan areas in all provinces except Ontario and Quebec which are doing their own. Returns are to be available for analysis in 1975-76.

Progress was made on development of computer systems for the storage debenture debt transactions of municipalities. These systems are expected to be operational in 1975-76.

To assist in compiling quarterly information on the transactions of the government sector of the System of National Accounts, electronic processing systems were developed for implementation next year.

A framework for detailed quarterly analysis of the government sector national accounts transactions was developed and will be published next year.

A quarterly survey of school board revenue and expenditure was implemented.

The division continued its promotional work on the implementation of standard accounts classification systems by municipalities and had discussions on the possibility of developing similar classifications for school boards.

Education, Science and Culture Division

There have been some dramatic changes recently in education, affecting both enrollments and full-time teaching staff. In the 1970s, the effect of the low birth rates of the mid-sixties began having an impact on enrollment at elementary education levels. By 1974-75, it is expected that full-time enrollments at the elementary-secondary levels will have declined to the level of enrollments in 1968-69.

The declines, however, have not been ex-

perienced at the post-secondary level with most of the growth recorded by community colleges. Universities have experienced much smaller increases. Hypotheses developed in attempts at explanation range from increased student disenchantment with universities to students delaying entrance into post-secondary institutions and using the elapsed time to travel or follow personal interests. No one explanation is probably sufficient.

Changes in full-time teaching staff have closely paralleled those of the student enrollments but, for the most part, the increases have been higher and the decline in growth rates slower. In comparing elementary-secondary with post-secondary annual increase rates, it is evident that post-secondary institutions have generally more than doubled the elementary-secondary increases while both levels have had declining annual rates of increase. By the 1970s, these differences generally began to decline. It is projected that by 1974-75, the elementary-secondary level will experience absolute annual declines of two per cent in student enrollments and one per cent in full-time teaching staff. At the same time, the projections suggest little or no change in the number of full-time teachers and small increases in post-secondary school enrollments.

During 1973-74, the Division underwent a

major evaluation and restructuring of its publication programmes with many new titles added and changes in existing publications.

Developments within the division during the review year are reported by area.

The Education Sub-Division, established in 1973-74, is organized in three sections based essentially on levels of education: elementary-secondary, post-secondary and vocational-continuing education.

Major thrusts were towards the planning, development and implementation of individual-based information systems. The University Student Information System (U.S.I.S.), utilizing the institutions' registration computer records, was the first of its kind. Similar projects are being developed for college students, university and college instructional staff, and elementary and secondary teachers.

The creation of a separate section for vocational and continuing education statistics represents a recognition of the tremendous growth in these fields and their importance to the over-all educational objectives. The section has developed plans for statistical programs to describe the nature and scope of vocational and continuing education programs, to determine the extent of involvement of Canadians in these programmes and to study the factors influencing participation or non-participation.

The Elementary-Secondary Section has initiated a project whereby educational data collected by the section can be related to population data from the 1971 Census of Canada.

In Science Statistics, a new programme has been established to produce and publish national aggregate statistics on research and development derived from the section's surveys. Data cover research and development in technology and the natural sciences, showing the flow of funds from sector of financing to sector of performance. Estimates now will be prepared annually.

Two pilot surveys of provincial government scientific activities were conducted — in Alberta and Nova Scotia — to improve the data base on government scientific activities. It is hoped that the techniques, definitions and concepts will assist other provincial governments.

In the Canadian industry sector, a survey of technological innovation activities was undertaken in conjunction with a 1973 industry survey. The 1973 sample was made up of the 100 largest research and development performers, all those in the pulp and paper industry and a number of small performers. Preliminary data were circulated for comment.

The Culture Sub-Division was created during 1973-74 with three sections — the Fine Arts and Mass Media Section, the Cultural Institutions Section and the Travel, Tourism and Outdoor Recreation Section. The first two replace the previous Cultural Information Section.

The Fine Arts and Mass Media Section undertook two new surveys. The first, on book publishing, is surveying each individual Cana-

dian book published or reprinted during 1972 and 1973. Sought are statistics on the type of books, their authors, the language in which they are written and their sales. The second, on performing arts, analyses main theatrical companies.

The Cultural Institutions Section has expanded the number of museums, art galleries and related institutions it is surveying. It is also modifying the questionnaires used to survey libraries.

The Travel, Tourism and Outdoor Recreation Section has revised its digest, adding new chapters and more statistics in old ones.

The sub-division has started to examine the possibility of conducting an on-going, national time use survey. It would examine how various groups spend their time and would analyse, in greater detail, their involvement in certain activities.

Health Division

The Health Division is organized into eight major sections — Vital Statistics, Mental Health, Public Health, Epidemiology, Hospitals, Special Care, Primary Care and Health Manpower — that provide a wide range of health statistics.

The Vital Statistics Section is responsible for producing national statistics on births, stillbirths, deaths, marriages and divorces which are compiled from copies of registrations filed with Provincial Registrars of Vital Statistics. In co-operation with the Federal Department of Justice, the section also compiles divorce statistics. The section publishes a series of annual reports and detailed tabulations on births, stillbirths, deaths and marriages for provincial use. It also provides secretariat services for the Vital Statistics Council for Canada which consists of Provincial Registrars of Vital Statistics and Statistics Canada representatives. This Council identifies, studies, and makes recommendations dealing with the legal, administrative and statistical aspects of the registration of vital events in Canada.

New, standardized vital registration documents have been adopted by nine of the 12 provinces and territories. By January 1, 1975, the remaining regions are expected to use the new forms. The section also concluded negotiations with six provinces for revising cost-sharing agreements.

The section provided data for a number of epidemiological studies undertaken by various researchers. In addition, the section is conducting analytical studies on specialized aspects of epidemiology and demography.

The Mental Health Section produced statistics on patients identified by Canadian psychiatric inpatient facilities and has started a new program for producing summary outpatient data.

The seventh annual mental health preliminary report was published in January, 1974 and was distributed as an insert in Health and Welfare Canada's March-April issue of Canada's

Mental Health. *Volume 1, Institutional Admissions* as Separations, 1971 was published shortly after. A third annual report: *Volume 11, Patients on Books of Institutional 1966-69*, is being prepared and will be published in 1974.

During the year, the Public Health Section was split into the Epidemiology Section and the Hospital Morbidity Section. The latter is responsible for Hospital Inpatient Statistics and Therapeutic Abortion Statistics. Three volumes of Hospital Inpatient Statistics are published annually, two on diagnosis and one on operations performed. Special studies were carried out for users requiring more detailed information or unpublished data. Two reports on Therapeutic Abortions were issued during 1973. British Columbia has joined the individual case reporting system and, on April 1, 1974, Ontario will participate bringing all 10 provinces into the system.

The Epidemiology Section was formed in 1974 to cover statistics on Notifiable Diseases, Tuberculosis, Cancer and Renal Dialysis which were subject areas formerly covered by the Public Health Section. The section is responsible for the publication of the *Notifiable Diseases Weekly Summary*, *Annual Report of Notifiable Diseases*, *Tuberculosis Monthly Report*, *Tuberculosis Statistics Annual Report Volume 1*, and *New Primary Sites of Malignant Neoplasms in Canada*. Several reports on Renal Dialysis have been prepared and will be published in the next year. Other statistics which are produced on a regular basis include statistical information for the monthly Epidemiological Bulletin published by Health and Welfare Canada. Special tabulations produced by the section include Actual and Expected Cases of Cancer by province, census division diagnosis and sex.

The Hospitals Section produce and analyze data on the institutional and economic aspects of Canadian hospitals. The Canadian schedule of laboratory workloads was revised in accordance with the recommendations of the Canadian Association of Pathologists' Committee on Unit Values. It has provoked interest among representatives of the West Indies, South America and the United Kingdom.

Development work on statistics of hospital case-mix data is proceeding to: (1) develop and publish measures of utilization in terms of patient characteristics (type of illness, age, sex, etc.) and, (2) develop statistics showing interaction of hospital and patient characteristics.

The Health Manpower Section collects information on health personnel. Arrangements have been made with pharmacists and dentists to utilize administrative records for statistical purposes. Preliminary discussions have been held with dental hygienists on an annual survey of this group. Current on-going surveys relate to physicians, nurses, physiotherapists and radio-logical technicians.

The Special Care Facilities Section was established during the year to collect information on facilities, other than hospitals, at which

health care is given. These include residential establishments such as nursing homes, homes for the aged, houses for the blind and non-hospital, outpatient facilities such as community health centres and day care centres. A list of potential respondents and a questionnaire form for an inventory survey have been developed and reviewed with the appropriate provincial authorities. A data-processing system has also been proposed. Plans were made for a federal-provincial conference and an annual reporting form for nursing homes.

A new section, Primary Care, has the responsibility to examine an area almost untouched by national statistics: illnesses suffered and medical treatment given outside of hospital inpatient wards. One approach to collect information in this area is to obtain primary health care statistics from physicians' medical claims. A second approach, being studied is to use a simple register-type record which is completed in the physician's office.

With the help and co-operation of two provinces, the section is processing individual claim data and establishing norms for sampling these records for special studies and for ad hoc retrieval. The section is also aggregating information for samples of these abstracts to provide longitudinal information bearing on the course of illness and the effect of health treatment over time.

Judicial Division

Highlights of the Judicial Division's 1973-74 activities included:

- The UCR programme was extended to 90 categories to provide more details on offences, a better indicator of criminal activity in Canada and provide better research and analysis capabilities;
- The murder study was extended to include all homicides (murder, manslaughter and infanticide);
- Plans were completed to combine crime and traffic publications and to provide more detailed information;
- A study of the effects of the Bail Reform Act was undertaken;
- A feasibility study on civil courts statistics was undertaken;
- The integration and standardization of the adult and juvenile court programmes were undertaken;
- Timeliness and diagnostic data for courts were introduced for the provinces; and
- An integrated, standardized systems design for corrections was undertaken.

Statistical Services

This field supports data-collection and compilation operations, including survey methodology, field survey work and data processing.

I. P. Fellegi, Assistant Chief Statistician

- Household Surveys Development
- Business Survey Methods
- Census and Institutional Survey Methods Division
- Field Division
- Systems and Data Processing

Household Surveys Development Staff

This division provides methodological assistance for the design and conduct of sample surveys of households and can be considered within the framework of the following groupings: Labour Force Survey, Consumer Income and Expenditure Division Surveys, methodology research, general survey system, consultation and ad hoc surveys.

Labour Force Survey

Work was initiated on a production standards system which is designed to provide a more scientific basis for interview evaluation and to generate basic data for studies on interviewer behaviour.

An experimental telephone programme, initiated last year, is continuing with the first stage completed and a programme for larger Survey Response Units is being set up. It has been estimated that telephoning will reduce interviewing costs by approximately 20 per cent in designated areas. The second stage involves an experimental procedure designed to centralize telephoning and to provide specialists in the various operations. The effects on quality measures, such as cost and non-response, and on Labour Force characteristics, such as unemployment and participation rates, are to be studied.

The division has also studied movements in non-response and slippage and in identifying reasons for the fluctuations.

The variance-covariance system to provide estimates of coefficients of variation is to be revised to provide more flexibility in permitting stratification indices as well as variance studies for more characteristics.

Developments continued in Revised Labour Force Survey methodology. Stratification and PSU selection, field counts, formation and selection of groups and clusters were completed in early 1974, and plans call for a parallel run of the RLFS and LFS in 1975.

Data from the Revised LFS passes through a number of identifiable stages and at each of these, a monitoring procedure must be set up. The stages have been identified and specifications are being prepared.

A pilot survey was undertaken to study the feasibility of conducting LFS on Indian Reserves. Also, a design was developed and sample selected for a study on unemployment pattern in Saskatchewan, as requested by that province.

Two alternatives for developing a generalized Labour Force Supplementary Survey weighting procedure were evaluated. It was decided that the estimation procedure for the Revised Labour Force supplementary should be

developed as a part of the new data processing system. Meanwhile, the current Labour Force Supplementary Survey weights will be obtained by adjusting the main Labour Force Survey weights for the non-response to the supplementary, relative to the Labour Force Survey response.

The staff was involved with the sample selection and weighting procedure for the Family Expenditure Survey (a 12-month Food Diary Survey during 1974 and a Recall Survey planned for 1975) as well as Consumer Finance Surveys and Household Facilities and Equipment Survey. A senior methodologist has been assigned to work full-time on these surveys. The sample size for the diary and for the recall were about 12,000 households and covered 14 cities across Canada.

The staff provided consultative services both to Statistics Canada and other government departments on the following surveys:

Survey	Department
LIP Survey	Dept. of the Secretary of State
CMHC Longitudinal Survey (Pilot)	CMHC
US Auto Exit Study 1973-74	Dept. of Transportation
Air entry/exit survey of passengers on foreign airlines	
Sample Design — University of Saskatchewan	University of Saskatchewan
Newfoundland Resettlement Survey	Dept. of Regional Economic Expansion
EMR — TV News Clips	Energy, Mines & Resources
CMHC Longitudinal Survey (Main)	CMHC
National Nutrition Survey	National Health & Welfare
1971 Canadian Travel Survey	Dept. of Tourism
1971 Federal-Provincial Program	Dept. of Finance
Alaska Highway Tourism Survey	Govt. of Northwest Territories
Citizenship Participation in Popular Culture	Dept. of the Secretary of State
Leisure Time Data Bank	Ministry of State for Urban Affairs
Employment Loan Program	Dept. of Finance

Services provided on a cost recovery basis include: Extensive methodology consultation; sample size and estimate procedure determination; sample stratification and selection; control form design for field work; imputation and weighting procedures; results evaluation; survey management assistance, and project management.

Other

An elementary course in sampling theory has been developed and presented to junior statisticians and an advance course has also been provided.

Business Survey Methods

This division is responsible for survey methodological services and, in some special cases, systems design and development in the Business Statistics Field of Statistics Canada.

The following provides a summary of services provided to others by this division.

Business Register & Divisional Master Files

Most of the work in the Systems Sub-division was related to development of the Business Register and associated Divisional Master File Systems. The register has been in operation for more than two years and efforts have continued to upgrade its content, to develop the required computer systems and to develop record linkage techniques. Information from corporate and individual tax returns will be used in the register in the near future and research into the use of the other Revenue Canada files continues. An investigation has started on the use of data base systems and related techniques for both the Business Register and its associated systems.

Divisional Master File systems are about to be introduced in the Labour and Merchandising Divisions. These are independent maintenance systems for handling the register subset appro-

priate to the respective division's survey operations. They receive automatic updates from the register itself — mainly Revenue Canada information — and provide divisional updates to the register system. Similar systems are planned for Manufacturing, Construction, Transportation and Business Finance Divisions.

Profiling (Business Register & Profiling Division)

This division is playing a leading role in developing standardized systems and procedures (computer systems and other) for business profiling for arbitrary classes of information. These systems and procedures cover the entire operation of business profiling from co-ordination, through to the preparation of instruction manuals and the recording of relevant information in the Business Register, Divisional Master Files and elsewhere.

Front-End Systems

Front-end systems are being developed for application in divisions with DMFs. These will cover sample selection, creation of a control file for a particular mail survey, check-in of returned questionnaires and follow-up of non-respondents. They will also facilitate further research and development in the design of systems for, and evaluation of, business surveys.

Tax Data Acquisition

This program is designed to acquire data on unincorporated businesses for use in designing surveys and censuses that will reduce the response burden on small businesses. In a Winnipeg pilot project, it was indicated that coding quality control was desirable and it is being incorporated for the main program.

In 1974, the first year of a four-year program, a sample of T1 forms was selected. In subsequent years, a sub-sample will be selected from those in the sample and another group picked from the balance of the universe. The

resulting sample frame will consist of sole proprietors and partners in unincorporated businesses, with and without employees.

Merchandising and Services Division

New Retail Trade Survey

This division has provided assistance in the maintenance of the ongoing system, in the improvement of communications with the Business Register and in the development of a Merchandising Master File.

1974 Retail Commodity Survey

Although it was delayed to 1975 from the original 1974 schedule date, work continues on the specification of follow-up strategy for non-respondents and on the development of cost models for business surveys.

1981 Census of Merchandising and Services

In preparation for the 1981 Census of Merchandising and Services, a series of methodological and systems pre-tests is planned.

Manufacturing and Primary Industry Division

Preliminary research for an automated edit and imputation module for the Census of Industry is continuing.

Business Finance (CALURA) Division

The annual survey, which was extensively modified, has been monitored and some assistance given in maintaining and improving the system.

A redesign for the quarterly Industrial Corporation and Financial Institutions survey was proposed and development is continuing for implementation in 1974.

Work is also continuing on implementing a computer system to delineate inter-corporate ownership complexes and calculate non-resident ownership and control.

Labour Division

Job Vacancy Survey

In the review period, several projects were undertaken to either improve the statistical efficiency or to reduce the cost of the survey: sample size was reduced; interviews by telephone replaced personal interviews and a technique to handle the unusual responses was devised.

Occupation Employment Survey

The methodology and systems for the ongoing survey are nearly complete and tabulations are expected later this year. Preliminary work to determine the 1975 survey sample size, based on 1973 results, has started.

Employment Surveys (ES1 and ES2)

The revised versions of the Computer Edit and Imputation Subsystem (C.E.I.S.) and tabulation subsystem have been implemented. The de-

signing of the new D.M.F. — E.S.1 link program, the revision of the E.S.1 — C.E.I.S. and tabulation subsystems is under way. Reconciliation of the E.S.2 estimates with other survey estimates has been completed.

1973 Statistical Report (Benchmark Survey)

The 1973 Statistical Report was assembled to collect employment and earnings data from the small employer sector, education, health, welfare and governments sectors and employment data from the large employer sector. Some 260,000 questionnaires were mailed out and were followed up by a combination of telephone and face-to-face interviews. Estimates are expected towards the end of 1974.

Transportation and Communications Division

Substantial modifications were made during the year to both the stratification variables and the scope of the For-hire Trucking Origin and Destination Survey. Methodological analysis is planned to be a continuing integral aspect of this survey.

This division participated in an in-depth assessment of water transportation statistics collected and required by federal government departments and agencies.

Cost Recovery Projects

Tax Measures Review (TMR) Survey (Department of Finance)

The first round of the Tax Measures Review survey — designed to determine the effect of certain government tax legislation on the economy — was completed. Preliminary work has been done for the final round of this survey.

Capital Cost Allowance (CCA) Survey (Department of Finance)

This survey forms part of the review of Capital Cost Allowances being carried out by the Finance Department. The first contract covered the sample design and sample selection. A second contract will cover questionnaires processing, including result tabulation and any required methodological reports.

Census and Institutional Survey Methods Division

This division provides methodological services, including survey design and evaluation, to divisions in Census Branch and Institutional and Public Finance Statistics Branch of Household and Institutional Statistics Field, Agriculture Division, and Data Processing Division. In addition, it also provides support on various cost recovery projects. It provides a consultative service on matters relating to methodology.

Research work has been completed on measuring response errors and on estimating bias and mean square error of the raking ratio estimator.

Census Branch

During 1973-74, this division contributed to the following Census Branch programmes.

1971 Census Evaluation

A Reverse Record Check, measuring Census undercoverage, was completed and several reports were issued including some covering the analysis of the characteristics of missed persons. Response Variance figures were produced for all Census 2A data, and work continued on the production of 2B figures.

A system was developed for the coder variance project. Final reports were written on the Response Rate Study, the Change of Address Study, and the Drop-off Bias Study. Considerable work was put into deriving measures of coverage error from the LFS-Census match and a report was produced. As a by-product of the Reverse Record Check, a separate study of certain response errors was completed.

1974-76 Census Planning

Staff has participated in planning methodology and procedures in the following areas for the 1976 Census process: questionnaire content and design; enumeration procedures including the derivation of Census representative piece rates from the results of the 1971 Process Measurement Programmes; Regional Office processing operations; special processing in Head Office; data capture systems and their quality control; development and testing of GEISHA (Generalized Edit and Imputation System using the Hot Deck Approach) and weighting procedures.

Quality Control of Census Processing

A two-year evaluation and development programme for quality control (Q.C.) procedures in the field and the regional office processing was completed this year. Field Q.C. procedures for the 1974 Test Census used improved sampling procedures and expanded the scope to cover recognized gaps in the 1971 Census Q.C. procedures. Regional office coding for the 1974 census also represented significant change from the 1971 Census Q.C. procedures through the use of cumulative sum control charts.

1974 Census Evaluation

A series of evaluation projects have been designed to test methods to measure aspects of data quality. One is a new approach to obtaining response rates and others include projects to measure the effects of data capture and edit and imputations on Census data. As well, a systematic approach to a programme for measuring the quality of 1976 Census data has been proposed.

Other Census Work

In 1973, a report was completed on the feasibility of creating and maintaining an Address Register between Census dates. The re-

sults indicated that an effectively accurate and complete Address Register could be maintained when more than one source of update information was utilized. From an operational point of view, however, it was felt that only one source of update data — Post Office Point of Delivery Sheets — should be considered in the future. To check the accuracy and completeness of this source, a further study in Regina and Trois-Rivières was initiated. Results should be available late in 1974.

Education, Science and Culture Division

On the School Transportation Survey, work was concluded on edits, imputations and tabulations (including complex efficiency comparison specifications) and suggestions were made for improvements. On the Audio-Visual Media Survey, work was concluded on weighting procedures, variance calculations and methodology description. On Indian Education, a thorough evaluation of Education Division's and Indian and Northern Affairs' data was completed. Recommendations included one for the integration of surveys. Some work was done on the Federal Support in Education Survey, in an effort to integrate the Secretary of State and Statistics Canada surveys, and on the Evaluation of Enrolment Data to evaluate the quality of the information obtained.

Health and Welfare Division

The Division was involved in the methodological development of Health Manpower Surveys which included Radiological Technicians, Pharmacists, Physiotherapists and Registered Nurses. The five facility surveys (including Special Care Facilities, Emergency Service Facilities, Facilities for Emotionally Disturbed Children and Blood Banks and Psychiatric Outpatients) are similar in that they have limited populations but the frames are incomplete. The division's 1973-74 work was concerned with questionnaires, frames and methodology. In the cases of Special Care and Emergency Services Facilities, pre-tests were conducted and changes to questionnaire and methodology were subsequently made.

Agriculture Division

CISMD work for this client was mainly redesign in nature, leaving the subject matter staff looking after existing programmes and CISMD redesigning the corresponding new ones.

Duplication/Detailed Match

A clerical match between PCAS and Census forms was completed in Saskatchewan. The computer system was tested and evaluated against this "true" match using different "keys" and weights. Since matches unique to one process have to be investigated, progress is slow.

Enumerative Surveys

Some work was done on outstanding problems

from the 1972 Annual Enumerative Survey, such as using different weighting procedures and looking at the high cattle figures. In the 1973 AES, timing was much improved. Field work was completed within two weeks, preliminary crop and land estimates within three weeks and final figures after 10 weeks. Crop figures were close to the semi-annual results but livestock estimates were higher. The 1974 AES was completely re-designed, and this division did all mapping work. The sample was increased in some areas — particularly the Maritimes — to allow "reasonable" estimates of variance for use in quality checking of the 1976 Census of Agriculture. The 1973 Newfoundland Survey is similar to AES but with a sample of farms instead of areas. This division developed the system and had estimates out within seven weeks. Work was started on evaluation and re-design for 1974.

Livestock

The Poultry Survey was designed to supplement marketing board lists. For hogs, two pilot surveys were designed using a mail-out and telephone follow-up method. Both livestock surveys included the development of associated computer systems for their processing.

Crops

The 1972 data for the Potato Survey yielded lower-than-expected figures. However, the 1973 re-design survey yielded good acreage figures and the multi-stage design was evaluated. For the Objective Yield Surveys — including grapes, sour cherries, peaches and pears — a multi-stage re-design was developed, all mapping work was done by CISMD staff, and the surveys successfully completed despite the low priority funding.

Work was also started on studying population changes over time and how these affect sample designs, using 1966 and 1971 Census data and semi-annual data. Preliminary work has started on a list of farms for 1981 mail-out. Prince Edward Island 1971 income tax returns were used to match with the 1971 Census list.

Reports were written on income tax projects and rotating samples.

Data Processing Services Division; Quality Control of Data Capture

During the year, the study on the feasibility of capturing data with OCR equipment was completed and it indicated that the type-and-scan method of data capture, for string keying numeric applications, was superior to the existing key-punch and key-edit methods. Following a study of five major projects under way at the start of the year, two projects and a large part of a third were converted to OCR-type-and-scan applications and one was converted to direct read. The above projects use new methods of data capture but the quality control sample verification plans are still performed on the key-edit machines. In addition to these

continuing projects, quality control plans developed and used on the Highly Qualified Manpower Survey Project.

Considerable time is being spent on data capture methods for 14 new projects and in developing quality control plans for three. The quality control plan for the Revised Labor Force Survey (RLFS) has been completed and is scheduled for implementation on regional office mini-computers scheduled in late 1974.

Cost Recovery Projects

This division has been involved in cost recovery projects which included the Bail Reform Act Survey, the Highly Qualified Manpower Survey and Post-Secondary Student Surveys.

The Bail Reform Act Survey which was designed to produce reliable estimates of basic variables at national and provincial levels, commenced on a full-scale basis in late 1973. Approximately 160 courts were sampled in two time frame periods from which 7,500 cases per reference period were reported by court clerks to the Judicial Division. The data collection phase ran to April 1974. A computer system, utilizing mainly manual correction procedures for non-response problems or edit failures, was simultaneously developed. Twenty subject matter tables, by province and city, were presented to the Justice Department. As the Justice Department decided to analyze all survey aspects using Systems Dimension Limited staff, CISMD was frequently consulted.

Divisional staff continues to be involved in the HQM survey, including a heavy involvement in the computer editing system, in setting up quality control systems and in handling methodological problems in manual processing. Weighting and variance estimation procedures were designed and specified. Work has started on the design of evaluation projects related to the quality of survey data.

Work has begun on the Senior Secondary Student Survey and Post Secondary School Survey, two surveys for the Secretary of State.

Field Division

The Division has continued to re-organize both its head office and its eight Regional Office operations to meet the increasing demands being placed on it as the sole field data collection arm of Statistics Canada.

On the monthly Labour Force Survey, extensive field tests determined that conducting interviews by telephone rather than by personal visit was both feasible and less costly and as a result, telephone interviewing has been introduced for approximately 40 per cent of the 33,000 households interviewed each month. Further testing of centralized regional office telephone interviewing is under way in Montreal and Toronto in an effort to effect even greater cost savings. In addition to the cost-saving, the testing programs have also indicated higher response rates.

Development work for the Revised Labour Force Survey has accelerated.

Dual disk-drive mini-computers with associated data entry keyboards, high speed printers and de-collators are installed in the regional offices.

The Division increased its business survey support through the collection of delinquent reports. During the year, regional staff collected more than 60,000 business reports for a wide variety of subject matters.

In addition to the on-going Job Vacancy Survey, the Occupational Employment Survey began with a program of interviews with firms. This survey is to provide information on occupations by industry and geographic area.

For the Consumer Price Index, prices collections were expanded. Retail prices were collected in 34 urban centres, and, in addition, a number of special pricings were carried out to isolate the dual effects of budgetary tax changes and prices changes resulting from the 1973 "energy crisis". A major special pricing of food and household supplies was conducted in about 550 retail outlets across Canada for the preparation of average price statistics. The quarterly collection of new-housing prices was continued to support the production of Residential Building Price Indices. A major pricing and market availability survey of household appliances was carried out in 11 cities for preparation of a Spatial Price Index. A full consumer budget pricing was also carried out in Ottawa to provide a base for Foreign Service Allowance Indices.

In preparation for the 1976 Census, the Division modified the self-enumeration data collection system which was used in the 1971 Census. These changes were part of the Census Test of Population, Housing and Agriculture to be held in May and June of 1974. The Test involves about 87,000 dwellings and 7,000 agricultural holdings in the Moose Jaw, North Bay and Trois-Rivières areas.

The special projects section carried out a number of surveys with the Highly Qualified Manpower Survey being the largest. It consisted of a mail-out to 135,000 persons with an extensive telephone follow-up for non-respondents. A pilot project was conducted during October and November, 1973, for the Seasonal Employment Survey which was scheduled for May, 1974. To test new questions for the up-coming Food Expenditure Survey, a pilot survey was conducted in Vancouver and Montreal during August, 1973. It helped determine the line of questioning for the main survey of 14,000 households in 14 major cities which runs through 1974. In June, a pilot survey was conducted in Toronto and Hull in preparation for a 75,000-household survey, planned for the 1974-75 fiscal year which is being sponsored by Central Mortgage and Housing and is called the Survey of Housing Units. Following the pilot study, the sponsor requested additional information on room dimensions. Because this is extremely difficult data to obtain, a "mini-pilot" was carried out to assess three different methods for obtaining

it. This "mini-pilot" indicated that the best method was to leave a tape measure with the respondent and to call back — personally or by telephone — a couple of days later. This approach was adopted. The Agriculture Enumerative Survey, conducted in July, involved a sample of 6,700 farms across Canada all field work was completed within a two-week period. Next year's AES sample will be increased to 8,000 farms and will be entirely new.

Another "first" in data collection operations was the International Truck Traffic Survey. Personnel was on duty 24 hours a day for a seven day period at 15 border crossings, interviewing truckers coming into and leaving Canada. In all, 45,000 questionnaires were completed.

Other surveys included the Consumer Finance Survey involving 12,000 households, a pilot survey for the still-planned Survey of Non-Work Time and the on-going Merchandising Outlet Survey which involves a workload of 1,800 segments.

Systems and data processing

This branch provides comprehensive electronic data processing (EDP) systems and production services to the data-gathering and information-disseminating divisions of Statistics Canada. Closely associated is an intensive and continuing research effort devoted to the development of general survey processing systems and components.

- Automation Research, Planning and Audit Division
- Data Processing Division
- General Survey Systems
- Systems Development Division

Automation Research, Planning and Audit Division

This division was created this year to give the bureau a stronger EDP planning function.

In the area of data conversion, the division concentrated its effort on optical character recognition (OCR) by performing an intensive feasibility study and evaluating existing hardware and systems. As a result, an IBM 1288 document reader was installed.

Treasury Board approval was obtained for upgrading the bureau's computer to a S/370-1968 after an assessment of the bureau's current and anticipated EDP requirements.

The division continues to provide technical advice and support for photo-composition and has participated with other groups in special studies on word processing, EDP Security, computer terminal usage and data communication monitors.

Data Processing Division

The bureau's computer system is an IBM S370/165 with core capacity of two million bytes and a disk storage capacity of 3.6 billion bytes. Associated peripherals included an in-house terminal network providing access for a large group of Statistics Canada users. The computer centre operates round-the-clock

Monday to Friday and eight hours daily Saturdays and Sundays.

Census returns continued to account for a large part of computer usage and development of data-processing procedures for the 1974 census test were carried out. The division helped establish a mini-computer network in the eight Statistics Canada regional offices to be used initially as a data gathering and transmission system for the Labour Force Survey.

The division's data conversion capability significantly increased by the installation of the IBM 1288 optical scanner.

General Survey Systems Division

The development of the editing system — GEISHA — has been an important activity for survey systems. This implements an automatic approach to editing and imputation developed by I. Fellegi and T. Holt and will be used on 1974 and 1976 Census of Population data. It is a flexible system which could be used for most Statistics Canada household surveys.

Generalized programs for stratification, sample selection and estimation of survey data have been implemented as part of a long-range task to develop an integrated general survey system. The methodological specifications were provided by an inter-divisional team of statisticians in the Statistical Services Field.

Other activities have been in the development of data base management system components. The success of STATPAK — a data storage, retrieval and tabulation system — gave impetus to the development of more general data base management systems for accessing statistical data. Linked with these developments, the division has started work on a data dictionary system.

Systems Development Division

The Division has accelerated efforts towards generalized approaches for systems development with emphasis on problem and requirement analysis.

At year's end, several significant applications of data base technology were in progress: an Integrated Vital Statistics System, a forerunner of similar systems expected to be developed, and a Central Process Control data base for the 1976 Census have been developed.

Efforts continue to accelerate the tabulation and publication process with the next stage being the automation of tabulation design. This would involve employing a graphical display device to interactively simulate specified output and then automatically generate a control program to issue the necessary instructions to the photocomposition device. This will give

users a new flexibility in publication format design.

In the Business Statistics Systems Subdivision, a new organizational approach was taken towards the design of computer-based survey systems. Rather than assign a development team to a survey, survey functions will be assigned to functional development teams. As a result, expertise will accumulate and experience and training acquired will be available for future improvements of the function. Functional teams established are: Divisional Master File Construction, Quantitative Data Editing and Tabulation Design.

In data-editing, the division has acquired several new tools; among them a proprietary package using decision tables as input and an editing system conceived and developed within the bureau. Both have reduced development time.

Data Administration Group

The Data Administration Group has implemented several systems and procedures for security and integration of the bureau's data resource: a password system for magnetic tape files, computer-user identification procedures and an inventory system for machine-readable data files. The latter became operational in April and is part of the S370/165 operations, logging the creation of all new machine readable files and keeping statistics on their use.

In co-operation with the General Survey Systems Division, a data dictionary development project was started.

EDP Training

With the increased number of terminals in the Bureau, many divisions are training personnel in the Administrative Terminal System (ATS) and Remote Job Entry (RJE). However, the most attended courses continued to be the Introduction to Data Processing and Computer Systems Fundamentals.

Among the new courses tried this year was one called IDEALS (Ideal Development of Effective and Logical Systems) which helps determine the job and the solution, a phase of systems analysis hardly touched in other courses. A noon-hour supervision series was produced for the staff.

On the technical side, an updated course on operations training was introduced. An in-shop training course was purchased from IBM and modified to the bureau's need. It resulted in evident benefits.

The EDP library activity has increased and an additional service is being provided by circulating the index page of the EDP periodicals. Reprints are then provided on request.

Marketing Services

This field promotes general awareness of the bureau and its programme as well as encourages use of statistical information.

A. Boisvert, Assistant Chief Statistician

- Information Division
- Statistics Canada Library
- User Advisory Services

Information Division

The division helped Census Field in preparations for the 1974 test census and although the test was not designed specifically for the purpose, possible advertising and public relations approaches for the 1976 census were assessed. Regional brochures were prepared for the three test sites and a separate agricultural promotional programme was developed.

A booklet designed for the layman and entitled *Statistics Canada*, was produced to give a capsule summary of the bureau and its programmes.

A new weekly publication *Infomat* was launched, replacing the old *Statistics Canada Weekly*. Specifically edited for an audience that is not necessarily oriented to statistical data, this publication provides an easy-to-read digest of the bureau's total output.

Several displays were produced for divisions within the bureau.

The division also produced respondent-relations packages, assisted in direct-mail programmes and drafted letters eliciting support for some surveys.

Assistance was given reporters in preparing stories on various aspects of Statistics Canada.

The drafting and art sections both provided specialized services to the bureau's various

fields in support of their respective programmes.

The publishing section was formed to co-ordinate the publishing of the Department's main compendia, the *Canada Year Book* and the *Canada* handbook. Other major compendia will be added as the program develops.

The *Canada Year Book* is a basic reference book covering all aspects of the social, economic and political developments in Canada. This year, the format was redesigned and in-house text processing equipment was introduced.

The handbook *Canada* summarizes recent social and cultural aspects of Canadian life for the general public.

Library

Although primarily a research library for Statistics Canada officers and professional personnel, the Statistics Canada Library plays an important role as a statistical resource for others. It maintains a comprehensive collection of monographs, serials, documents and reports as well as extensive runs of other publications.

During 1973-74, substantial progress was made on implementing a new Statistics Canada Library Policy to achieve better control over the bureau's collection, the following measures were taken: a consolidated book budget was

created; several book collections and journals were transferred to the main library collection from divisions; small working collections were placed throughout the agency where they were available to all users; and improvements were made in the library catalogues. The quality and scope of the library's reference service was improved.

User Advisory Services

User Advisory Services became operational across Canada this year and emphasis was placed on developing an effective service for statistical users and maintaining liaison with provincial government agencies. The Division's major responsibilities include:

- Provision of information and advisory services to users and suppliers of data;
- Organization and co-ordination of continuing liaison with government and business;
- Development and extension of data use and market research;
- Development of a Statistics Clearing-House, or information referral centre;
- Improvement of "feedback" arrangements to obtain information on changing data requirements and on assessments of data quality and timeliness.

The Data Access and Use Section provides a central service to users and co-ordinates regional activities. Staff was hired in St. John's and Regina. The other offices were either enlarged or plans made for expansion.

The analysis of statistical inquiries and of user comments received considerable attention. There were 75,000 telephone calls, letters or visits received and, now, the professional staff are initiating visits to users.

A Regional Advisor was loaned to the Australian Bureau of Statistics for a marketing assignment.

As an experiment, computer terminals to access CANSIM were installed in the Montreal and Toronto offices with demonstrations arranged for selected people.

One-day workshops were organized on data usage by municipalities, banks, libraries, and the industrial chemical industry, with emphasis on the Census of Population. Business workshops were held in Halifax and Hamilton. The Division also participated in various association meetings and in a Seminar on Statistics for Corporate Decision-Making at London, Ontario.

The Consultative Services Section worked with outside agencies. A central Conference Secretariat was created and worked on 15 federal-provincial, international, and other meetings. Plans began for the newly-created Federal-Provincial Consultative Council on Statistical Policy, scheduled to meet first in late 1974.

A review of existing co-operative agreements with outside agencies continued and assistance was given in developing new agreements. A Statistics Canada survey inventory was started.

The Federal-Provincial Statistical News bulletin was enlarged in scope.

The Analysis and Development Section has the responsibility to develop new programmes. Work in market research and the development of an Information Clearing-House began.

The Director provided assistance on legal policy and statistics legislation and worked with the Department of Justice.

Census

Principal responsibilities of the Census Field revolve around planning, taking, processing, publishing and analysing the Canadian decennial and quinquennial censuses of population, housing and agriculture. They also include preparation of regular population estimates and projections and the conduct of some special surveys such as the Survey of Highly Qualified Manpower.

During 1973-74, this newly-created field was actively engaged in programs touching three national censuses: processing and publishing results of 1971, detailed planning for the 1976 quinquennial census and long-range planning for 1981.

Publication of the main results of the agriculture census and of the "short form" population and housing census was completed but delays in processing the long-form sample (Form 2B) slowed socio-economic data production and the population-agriculture linkage program.

Detailed plans were completed for a May, 1974, census test, a dress-rehearsal of proce-

R. A. Wallace, Assistant Chief Statistician

- **User Relations Co-ordinator**
- **Administrative Co-ordinator**
- **Content and Analysis Branch**
- **Census Production Branch**

dures planned for the 1976 quinquennial census.

Census Field completed the field work and initial processing of the Survey of Highly Qualified Manpower which it conducted for the Ministry of State and editing was near completion at year's end.

Other activities included issuing current population and family estimates as well as preparing a new series of population projections.

About 29,000 persons received assistance from the field in obtaining proof of age (for pension purposes) and proof of birthplace (for establishing citizenship).

User Relations Co-ordinator

The establishment of a Census User Relations Group supports the bureau policy to become more responsive to the needs of its major clients, such as federal and provincial departments and private agencies. A main function is to plan and maintain effective public relations programmes with these users and to co-ordinate the servicing of client requests. To pave the way for field collection of census data and to secure public co-operation, the User Relations Group works closely with Information Division on programmes to publicize census objectives and its value.

During the review period, the User Relations function was directed at furthering co-operative arrangements with provincial governments whereby provincial statistical needs were to be identified for Census Field. During 1973-74, informal meetings with provincial representatives were held along with conferences of the Federal/Provincial Committee on the Censuses of Population, Housing and Agriculture. As a result, detailed agreements on provincial participation in census plans were drawn up and co-operative arrangements for census data dissemination were made.

A publicity programme for the 1974 test census was developed in conjunction with the

Information Division. Informational brochures, fact sheets, posters and other material were prepared.

Administrative Co-ordinator

The Administrative Co-ordinator fulfills a management function dealing with support services, materiel management, accommodation, and manpower development and training. This division co-ordinates the preparation of census programme forecasts, budget estimates and expenditures, service contracts and submissions to Treasury Board.

During 1973-74, Census Administration assisted the re-organization of the Census Branch into a Field and restructured the census budget to reflect more accurately the resource requirements of each division.

Census Materiel Management obtained the necessary head office supplies for the 1974 Census Test and, at the same time, continued to provide its normal services to the field. In other support services, the automated terminal unit contributed more than 7,000 pages of text to the system while the output was more than 50,000 pages, most of it for 1974 test manuals. The clerical support unit provided more than 20 man-years in short-term staff to areas within Census Field.

Content and analysis branch

- Census Long-range Planning Division
- Population Estimates and Projections Division
- Census Characteristics Division
- Census of Agriculture Division

Census Long-Range Planning Division

The complex planning that has become mandatory in an age of self-enumerated and computer-oriented censuses caused Census Field to form the Long-Range Planning Division which has the 1981 decennial census as its first major assignment. It is to plan the scope, design, content and methodology for the 1981 census with sufficient lead time to carefully test both field and office procedures well before the census date.

The division's main activities, after its formation, involved examination and evaluation of the subject matter content of earlier censuses as well as an initial canvass of users to determine their likely future needs. The assessment of past censuses, along with some other in-depth studies, will form the basis for the initial 1981 census recommendations.

Population Estimates and Projections Division

One of the major 1973-74 accomplishments of the division was the completion of a new series of *Population Projections for Canada and the Provinces, 1972-2001*. (Catalogue No. 91-514). It was the fruit of two years of research which included the development of a population projection model capable of accommodating a

wide range of variables.

A principal divisional objective was to obtain more accurate and complete statistics on internal migration. To help, negotiations with various government departments led to new information being made available from sources such as family allowances, medicare and income tax. A new composite model for developing accurate estimates may be operational within two years.

The division produced its regular annual and quarterly estimates as well as special estimates to meet specific requests from federal and provincial government departments, universities, business firms and individuals.

Eight articles and papers were produced and published in various demographic and other scientific journals. Eleven papers were presented at conferences and the division made a substantial contribution in the preparation of Canada's statement for the World Population Conference planned for August, 1974.

Census Characteristics Division

The Census Characteristics Division bears the main subject-matter responsibilities for population and housing censuses, a role that was expanded in the 1972 reorganization of Statistics Canada.

During 1973-74, activities involved both the

1971 census and the 1974 test census. Specific 1971 census activities included tabulation verification and manuscript approval leading to the release of the following reports: 11 in the advance series, 38 in the volume series, one in the special series and most of the 29 in the census tract "A" series. Work also continued on planning and drafting analytical reports for the 1971 profile series. A number of evaluation studies, such as micro- and macro-comparisons of census economic characteristics data compared with May 1971 Labour Force Survey data, were completed and issued.

Contributions in the planning for the 1974 test census included providing subject-matter assistance in preparing manuals and the instruction booklet as well as developing specifications for editing the test data using GEISHA (Generalized edit and imputation system using the hot-deck approach).

Analysis of the 1971 concepts for the delineation of census metropolitan areas, census agglomerations and census tracts continued, providing the basis for determining the boundaries of these spatial units in 1976.

The division provided a professional consultative service to users of 1971 census data and verified the results of an average of 50 special-user request tabulations per month. As well, it was involved in the subject-matter

aspects of the Survey of Highly Qualified Manpower — the revising and testing of editing specifications and designing tabulations in co-operation with the Ministry of State for Science and Technology.

Special research activities included provision of four of six chapters for the monograph *"The Population of Canada: A Review of Recent Patterns and Trends"* which was one of a series of national monographs commissioned by the U.N. Committee for International Co-ordination of National Research in Demography for World Population, 1974. Other analytical memoranda, working papers and articles were published.

Census of Agriculture Division

This division is responsible for a separate agriculture census questionnaire which deals with the characteristics and economic activities of Canadian farms, gathering information on acreages, crops, livestock and machinery.

During 1973-74, the main tabulations and publications of the 1971 Census of Agriculture were released on schedule. However, there were still delays in the production of reports based on an initial attempt to link the agriculture and population questionnaires. Three analytical reports in the 1971 profile series were nearing completion. A user microfilm and computer summary tape file of the 1971 agriculture tabulations was prepared and a "Statpak" data base was established to service special tabulation requests.

Enumeration and office procedures for the 1976 census were tested in conjunction with the population and housing test census in 1974. Some work was done on determining the feasibility of using a mail-out/mail-back system in the 1981 agriculture census and a test of procedures will likely be conducted in conjunction with the 1976 Census of Agriculture.

In preparation for the 1976 census, an interdepartmental committee made a study of conceptual issues with particular emphasis on the definition and classification of census farms. A new method of classifying farms by product type was developed.

Census production branch

- Data Capture Division
- Census Data Processing Division
- Data Dissemination Division

Data Capture Division

The Data Capture Division is concerned with the entire data collection operation from the enumerator level to the stage where it is in a machine-readable form for processing. It provides the collection requirement specifications to Field Division, as well as develops and manages the contract arrangements for censuses.

In 1973-74, detailed plans were developed for the 1974 test census and the 1976 census. The Spatial Organization Section delineated assignments for census commissioners and census representatives and supervised preparation of the necessary field maps. This section offers a census map library service to all government agencies.

The Planning and Management System Development Section concluded developmental plans for the 1976 census and worked closely with Field Division in co-ordinating preparations for the 1974 test census. The Data Capture Applications and Development System developed the organizational structure, staffing procedures and time schedules for the 1974 test census while the Evaluation Section co-ordinated the new procedural and operational methodology testing for the 1974 test census.

The Special Projects Section completed

detailed planning for the Highly Qualified Manpower Survey undertaken for the Department of Secretary of State and, at the end of the fiscal year, returns were in the final machine-editing stage at head office.

Census Data Processing Division

Primary responsibilities of the Census Processing Division are: (a) the management of services provided under contract by other Fields relating to development of automated systems to establish efficient data bases and to ensure quality control; (b) the management of census data bases, including scheduling, processing, maintenance, monitoring and quality control; (c) the management of electronic data processing services, and (d) the design, development and implementation of geostatistical systems.

During the year, various problems delayed the publication of some reports and user summary tapes based on data from the "short" census questionnaires. However, the final July deadline was met. Processing of the 1971 census then focussed on validating the "long" questionnaire data base so that information from it could be released.

The division was given project management responsibilities for automated data processing

systems for the 1974 Census Test and the 1976 Census. As a result, the division began adopting GEISHA (the generalized edit and imputation system using the hot-deck Approach) to overcome problems encountered in prior censuses.

Work also started on extending geocoding to 17 more centres to bring the number of geocoded centres to 32. The present geocoding system is updated as well. The geocoding project will provide the basis for an address register which is necessary if Census were to move to a mail-out/mail-back collection system.

The division continued work on the mounting and verification of the 1961 Census data base in the STATPAK string format, to make it cheaper and easier to retrieve special tabulations from this Census.

Data Dissemination Division

The division's activities have been mainly in response to requests for census information from government, private agencies and individuals with most of the service provided by a Census Users' Inquiry Service. The division employs a variety of data products and media (e.g. printed census reports, unpublished tabulations, microfilm, computer tapes and maps) and undertakes production of custom-made tabulations to meet user requirements.

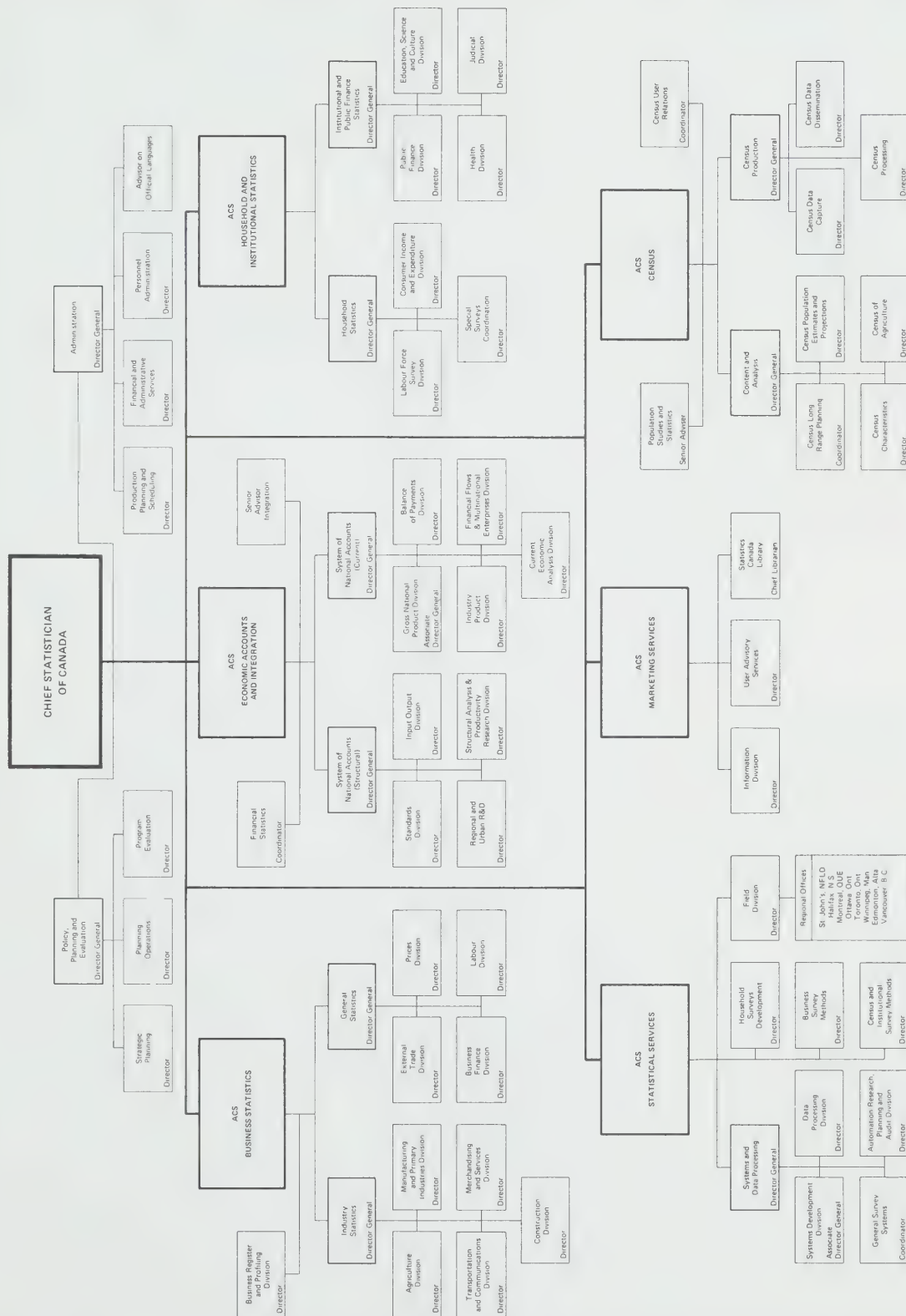
About 5,000 mailed requests for census

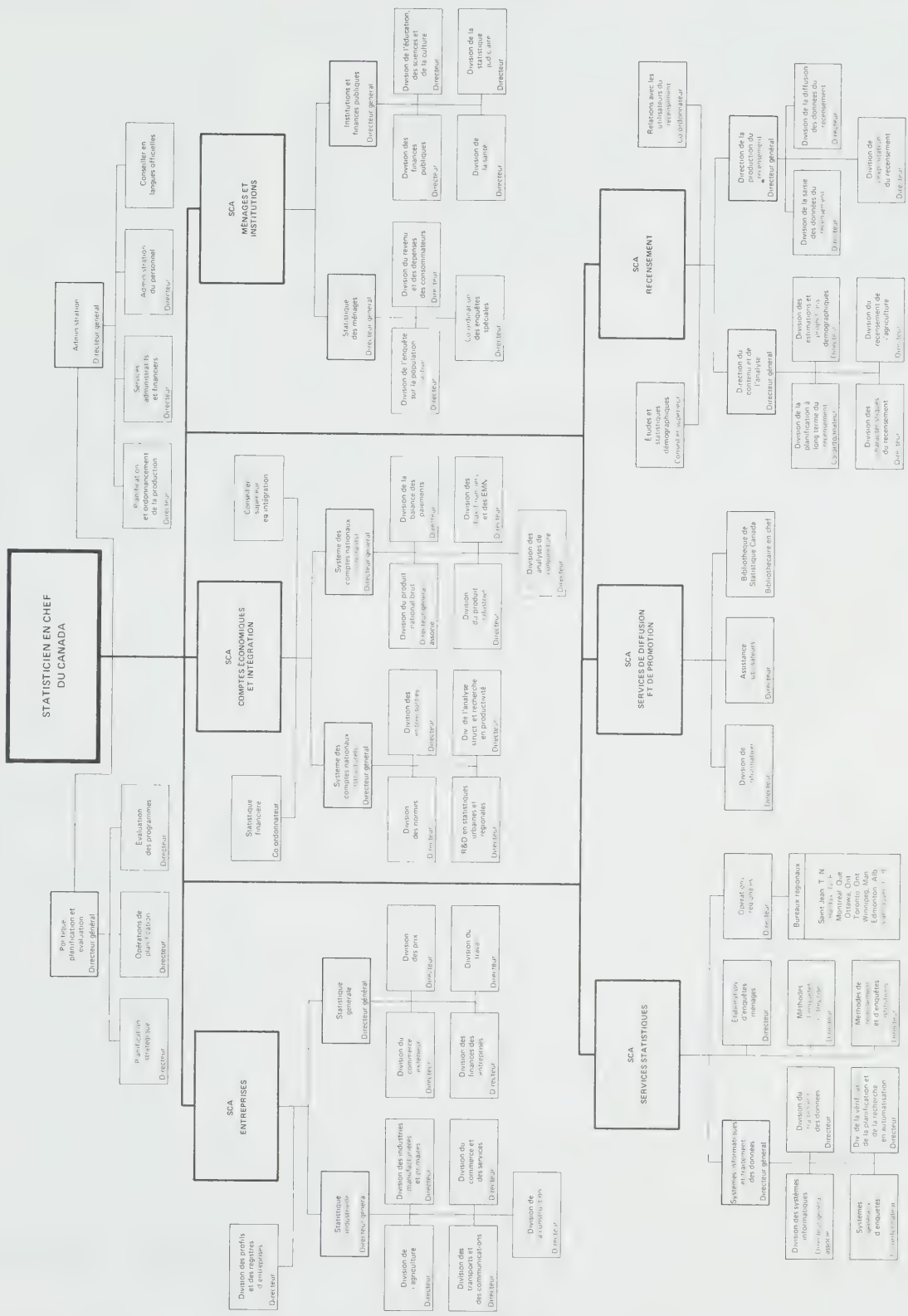
information were received. In addition, about 100 telephone inquiries per day for specific data, general inquiries, and follow-ups on earlier requests were handled. (These do not include orders for published census reports). More than 600 custom-designed computer tabulations were produced, at user cost, utilizing the GRDSR (Geographically Referenced Data Storage and Retrieval) system. Approximately 10 per cent employed the special Geocoding features for defining special areas.

Nearly 700 reels of computer summary tapes were supplied to more than 80 organizations in the government, business and academic fields, who requested unpublished small-area tabulations (e.g. Enumeration Areas, Census Tracts, Municipalities) in machine-readable form. Another 1,200 rolls of unpublished tabulations on microfilm, equivalent to 1.8 million pages of computer print-outs, were produced on request.

The Census Pensions Searches Unit conducted searches for proof of age and of birthplace for citizenship for 16,000 applicants. An additional 13,000 searches were made of the war-time 1940 National Registration Records for these persons.

Senior personnel participated in conferences and seminars to make various groups aware of the availability of census data and its applications.





répondre, par le truchement du Service assis-
tance-utilisateurs, aux demandes de données du
recensement provenant du gouvernement, d'or-
ganismes privés et de particuliers. La division
utilise à cette fin une foule de produits et
d'organes de diffusion (par ex., bulletins du
recensement, totalisations inédites, microfilms,
bandes d'ordinateur et cartes) et entrepren-
d la production de totalisations spéciales afin de
satisfaire aux besoins des utilisateurs.

On a reçu par la poste environ 5,000
demandes de renseignements sur le recense-
ment. En outre, on a répondu à près de 100
demandes téléphoniques de données spécifiques
ou de renseignements généraux et on a donné
suite aux demandes faites antérieurement. (Cela
ne comprend pas les commandes de bulletins
publiés du recensement.) Plus de 600 totalisa-
tions spéciales sur ordinateur ont été produites
aux frais de l'utilisateur par le système GRDSR
(Système de stockage et d'extraction des don-
nées codées selon une grille géographique). La
définition de régions spéciales à l'aide des
caractéristiques du géocodage a fait l'objet
d'environ 10 % de ces totalisations.

Près de 700 bobines de bandes sonnaïres
ont été envoyées à plus de 80 organisations
gouvernementales, commerciales et scolaires qui
avaient demandé des totalisations inédites de
petites régions (par ex., les secteurs de dénom-
bremen, les secteurs de recensement et les
municipalités) sous une forme lisible par ma-
chine. Pour répondre à la demande, on a
produit 1,200 rouleaux de microfilms renfer-
mant des totalisations non publiées, équivalent
à 1,8 million de pages d'imprimés mécano-
graphiés.

La Sous-section des recherches sur les pen-
sions a traité 16,000 demandes de particuliers
qui voulaient une preuve de leur âge et de leur
lieu de naissance. Ce service a également ré-
pondu à 13,000 autres demandes de renseigne-
ments contenus dans les dossiers de l'enregistre-
ment national de 1940.

Des hauts fonctionnaires ont participé à des
conférences et à des colloques afin de sensibi-
liser divers groupes sur la disponibilité des
données du recensement et leurs applications.

- Division de la saisie des données**

cations destinées au contrôle des données réalisées par le système GEISHA (Système généralisé de contrôle et d'imputation selon la méthode dite du "hot deck").

On a poursuivi l'analyse des concepts utilisés en 1971 pour délimiter les régions métropolitaines du recensement, les agglomérations du recensement et les secteurs de recensement afin de disposer d'une base qui servira à circonscrire les frontières de ces mêmes unités géographiques en 1976.

La division a offert un service de consultation professionnelle aux utilisateurs des données du recensement de 1971 et a vérifié chaque mois les résultats d'environ 50 demandes spéciales de totalisations. De plus, elle s'est occupée des aspects spécialisés de l'enquête sur la main-d'oeuvre hautement qualifiée, soit la révision et la vérification des spécifications de contrôle et la conception de totalisation en collaboration avec le ministère d'Etat aux Sciences et à la Technologie.

Au nombre de ses travaux spéciaux de recherche, mentionnons la rédaction de quatre des six chapitres de la monographie intitulée *The Population of Canada: A Review of Recent Patterns and Trends*. Ce document fait partie d'une série de monographies écrites à la demande du Comité des Nations Unies pour la coordination internationale des recherches nationales en démographie pour la conférence mondiale sur la population en 1974. On a publié d'autres notes de services analytiques, documents de travail et articles.

Division du recensement de l'agriculture

La division est chargée de mettre au point un questionnaire distinct pour le recensement de l'agriculture qui s'attache aux caractéristiques et à l'activité économique des fermes canadiennes et vise à recueillir des renseignements sur les superficies, les cultures, le bétail et les machines.

En 1974-75, les principales totalisations et publications des résultats du recensement de l'agriculture de 1971 ont paru à temps. On a cependant éprouvé encore une fois un retard à produire les bulletins fondés sur une première tentative de couplage des questionnaires sur l'agriculture et sur la population. Trois rapports analytiques de la série des profils de 1971 étaient presque terminés. On a préparé pour le bénéfice des utilisateurs un fichier des micro-films et des bandes sonores d'ordinateur concernant les totalisations du recensement de l'agriculture de 1971 et on a mis au point une bande de données "Stapak" afin de répondre aux demandes spéciales de totalisations.

Les procédures de dénombrement et de bureau pour le recensement de 1976 ont été mises à l'essai lors du recensement d'essai sur la population et le logement pour 1974. On a commencé à étudier la possibilité d'utiliser un système d'envoi et de retour des questionnaires par la poste pour le recensement de l'agriculture de 1981 et on procédera vraisemblablement à l'épreuve des procédures au moment du recen-

sement de l'agriculture en 1976. En vue du recensement de 1976, un comité interministériel a effectué une étude des concepts en s'attachant particulièrement à la définition et à la classification des fermes du recensement. Une nouvelle méthode de classification des fermes par genre de produit a été mise au point.

Direction du contenu et de l'analyse

- Division de la planification à long terme du recensement
- Division des estimations et des projections démographiques
- Division des caractéristiques du recensement
- Division du recensement de l'agriculture

Division de la planification à long terme

La planification complexe que nécessitent l'autodéveloppement et la mécanisation de certaines opérations du recensement ont amené le Secteur du recensement à mettre sur pied la Division de la planification à long terme qui a

pour tâche principale de préparer le recensement décennal de 1981. Elle doit planifier la portée, la conception, le contenu et les méthodes du recensement de 1981 tout en se ménageant assez de temps pour mettre soigneusement à l'essai les procédures sur le terrain et de bureau bien avant la date du recensement.

Une fois créée, la division s'est occupée principalement d'examiner et d'évaluer le contenu spécialisé des recensements antérieurs et de dresser une liste des utilisateurs afin d'établir leurs besoins futurs. L'évaluation des recensements précédents et d'autres études approfondies aideront à formuler les premières recommandations en vue du recensement de 1981.

Division des estimations et des projections démographiques

L'une des principales réalisations de la division, en 1974, a été la mise au point d'une nouvelle série intitulée "Projections démographiques pour le Canada et les provinces, 1972-2001"

(n° 91-514 au catalogue). Fruit de deux ans de recherches, ce travail a également comporté la construction d'un modèle de projection démographique pouvant recevoir un grand nombre de variables.

La division s'est fixée comme objectif principal de recueillir des statistiques plus justes et plus complètes sur la migration interne. À cette fin, elle a pu obtenir, aux termes de négociations avec différents ministères, des données nouvelles provenant des dossiers sur les régimes d'allocations familiales et d'assurance frais médicaux et des dossiers de l'impôt sur le revenu. Un nouveau modèle composite destiné à établir des estimations plus précises pourrait être mis en œuvre d'ici deux ans.

La Division a produit ses estimations annuelles et trimestrielles régulières ainsi que des estimations spéciales en vue de répondre aux demandes spécifiques des ministères fédéraux et provinciaux, des universités, des entreprises et des particuliers.

Elle a rédigé huit articles qui ont paru dans quatorze exposés de conférences. En outre, elle a contribué grandement à la rédaction du document que présentera le Canada à la Conférence mondiale sur la population prévue en août 1974.

Division des caractéristiques du recensement

La Division des caractéristiques du recensement assume les tâches spécialisées des recensements de la population et du logement, nouveau rôle qui lui avait été dévolu lors de la réorganisation de Statistique Canada en 1972.

En 1973-74, ses activités ont porté sur le recensement de 1971 et le recensement d'essai de 1974. En ce qui a trait au recensement de 1971, elle devait plus particulièrement s'occuper de vérifier les totalisations et d'approuver les manuscrits pour la publication des bulletins suivants: 11 dans la série anticipée, 38 dans la série des volumes, 1 dans la série spéciale et la plupart des 29 autres dans la série "A" des secteurs de recensement. On a également continué la planification et la rédaction des rapports analytiques pour la série des profils de 1971. On a terminé et publié un certain nombre d'études d'évaluation, comme les micro et macro-comparaisons des données sur les caractéristiques économiques du recensement et des résultats de l'enquête sur la population active effectuée en mai 1971.

La division a contribué à la planification du recensement d'essai de 1974 en fournissant des spécialistes pour la rédaction des manuels et du livret d'instructions et en élaborant des spécifi-

R.A. Wallace, Statisticien en chef adjoint

● **Coordonnateur, Rapports avec les**

utilisateurs

● **Coordonnateur administratif**

● **Direction du contenu et de l'analyse**

● **Direction de la production**

travail sur le terrain; le traitement initial des données de l'enquête sur la main-d'œuvre hautement qualifiée, effectuée pour le ministère d'un recensement d'essai en mai 1974 et d'une répétition générale des procédures pour le d'Etat, aux sciences et à la Technologie, ainsi que la vérification étaient presque achevés à la fin de l'année.

Ses autres activités comprennent la publication d'estimations courantes de la population et des familles et la préparation d'une nouvelle série de projections démographiques.

Le Secteur est venu en aide à environ 29,000 personnes en leur fournissant une preuve de leur âge (pour le régime de pension) et de leur lieu de naissance (pour établir la citoyenneté).

Les principales fonctions du Secteur du recensement consistent à planifier, à effectuer les recensements quinquennaux et décennaux de la population, du logement et de l'agriculture au Canada, à exploiter les données recueillies et à publier et à analyser les résultats. Il voit également à préparer les estimations et les projections démographiques régulières et à mener des enquêtes spéciales comme celle sur la main-d'œuvre hautement qualifiée.

En 1973-74, ce nouveau secteur s'est occupé activement de programmes concernant trois recensements nationaux: dépourlément et publication des résultats de 1971, planification détaillée du recensement quinquennal de 1976 et planification à long terme pour 1981.

On a terminé la publication des principaux résultats du recensement de l'agriculture et des formules abrégées du recensement de la population et du logement, mais les retards dans le traitement des formules complètes (Formules 2B) ont ralenti la production des données socio-économiques et le programme de couverture des données sur l'agriculture et la population.

On a mis au point les plans détaillés en vue du recensement quinquennal de 1976.

détailés à participer à la planification et à la diffusion des données du recensement.

En collaboration avec la Division de l'information, on a mis au point un programme de publicité pour le recensement d'essai de 1974 comprenant des brochures explicatives, des feuilles de renseignements, des affiches et d'autres imprimés documentaires.

Coordonnateur administratif

Le coordonnateur administratif exerce une fonction de gestion en ce qui a trait aux services de soutien, au matériel, aux locaux et à la formation et au perfectionnement du personnel. La division coordonne la préparation des prévisions de programmes du recensement, les estimations budgétaires et les dépenses, les contrats de services et les demandes au Conseil du Trésor.

En 1973-74, l'Administration du recensement a aidé à réorganiser la Direction du recensement en secteur et a remanié le budget du recensement de façon à mieux rendre compte des besoins en ressources de chaque division.

La Section de la gestion du matériel du recensement a obtenu les fournitures nécessaires au bureau central pour le recensement d'essai de 1974 et a continué à assurer ses

provinces se sont engagées aux termes d'accords fédéral-provinciaux des recensements de la population, du logement et de l'agriculture à égalité hors des contraintes hiérarchiques. Le Comité avec les représentants provinciaux ont eu lieu pendant 1973-74, des réunions provinciales afin que ces derniers fassent connaître leurs besoins statistiques au Secteur du recensement.

Améliorer les rapports avec les gouvernements provinciaux et le groupe s'est occupé des objectifs du recensement.

La création d'un groupe chargé d'entretenir des rapports avec les utilisateurs des données du recensement vient appuyer la politique Statistique Canada qui veut accorder une plus grande attention aux besoins de ses principaux clients, notamment les ministères fédéraux et provinciaux et les associations privées. Sa fonction principale est de planifier et d'assurer des programmes efficaces de relations publiques pour ces utilisateurs et de coordonner les activités de la Division de la diffusion des données. Dans le but de faciliter la collecte des données de recensement sur le terrain et de s'assurer la collaboration du public, ce groupe travaille étroitement avec la Division de l'information à faire connaître davantage la valeur et

Coordonnateur, Rapports avec les

utilisateurs

d'une directive légale et de lois en matière statistique et a collaboré avec le ministère de la Justice.

- organiser et coordonner des relations suivies avec les administrations publiques et les entreprises;
- accroître et étendre l'utilisation des données et la recherche de marchés;
- créer un centre d'échange de données ou une information statistique;
- améliorer les mécanismes d'information en retour afin d'obtenir des renseignements sur les besoins changeants en matière statistique ainsi qu'une évaluation de la qualité et de l'actualité des données.

La Section de l'accessibilité et de l'utilisation des données offre un service central aux utilisateurs et coordonne les activités régionales. On a embauché des employés à Saint-Jean (T.-N.) et à Regina. Les autres bureaux ont été agrandis ou le seront dans un avenir rapproché. L'analyse des demandes de statistiques et des observations des utilisateurs a mobilisé d'importantes ressources. On a reçu quelque 75,000 appels téléphoniques, lettres ou visites et les spécialistes ont maintenant commencé à visiter les utilisateurs.

Un conseiller régional a été prêt au Bureau australien de la statistique en vue d'un projet de commercialisation.

On a installé, à titre d'essai, aux bureaux de Montréal et de Toronto des terminaux d'ordinateur reliés à CANSIM et des démonstrations ont eu lieu devant certains groupes choisis.

Des ateliers d'une journée ont été organisés afin d'expliquer aux municipalités, aux banques, aux bibliothèques et à l'industrie chimique comment utiliser les données et en particulier, celles provenant du recensement de la population. Les entreprises d'Halifax et d'Hamilton ont également bénéficié d'ateliers. La division a aussi participé à diverses réunions d'associations et à un colloque intitulé "Statistique et décision dans l'entreprise" à London (Ontario).

La Section des services de consultation a travaillé avec les organismes extérieurs. Le nouveau Secrétaire central des conférences a participé à 15 réunions fédérales-provinciales, internationales et autres. On a commencé à élaborer les plans du récent Conseil consultatif fédéral-provincial sur la politique statistique dont la première réunion est prévue pour la fin de 1974.

On a poursuivi la révision des accords actuels de coopération avec les organismes extérieurs et aidé à en rédiger de nouveaux. Un relevé systématique de toutes les enquêtes effectuées par Statistique Canada a débuté.

On a étendu le champ d'action du bulletin des nouvelles statistiques fédérales-provinciales. La Section de l'analyse et du développement est chargée de la mise au point de nouveaux programmes. À cet égard, elle a amorcé un projet de recherche des marchés et la mise sur pied d'un centre d'échange des données.

Le directeur a participé à l'élaboration

Ce secteur s'active à faire connaître Statistique Canada et ses programmes et encourage l'utilisation des renseignements statistiques.

- A. Boisvert, Statisticien en chef adjoint
- Division de l'information
- Bibliothèque de Statistique Canada
- Assistance-utilisateurs

Division de l'information

La division a prêté main forte au Secteur du recensement pour les préparatifs du recensement d'essai de 1974 et, même si l'essai n'était pas conçu spécialement à cette fin, on a évalué diverses méthodes de publicité et de relations publiques pour le recensement de 1976. On a rédigé des brochures pour chaque région d'essai et un programme promotionnel sur l'agriculture a été mis au point.

Une brochure d'intérêt public intitulée *Statistique Canada* a été imprimée afin de donner un bref aperçu de cet organisme et de ses programmes.

L'Hebdomadaire de Statistique Canada a fait place à une nouvelle publication hebdomadaire intitulée *Infomat*. Conçue spécialement pour un public qui ne s'intéresse pas directement à la statistique, elle présente un condensé vulgarisé de toute la production de Statistique Canada.

Plusieurs présentoirs ont été montés à l'intention des divisions. La division a également produit des documents, participé aux programmes d'envoi postal direct et rédigé des lettres en vue de solliciter la collaboration des enquêtes à certaines enquêtes. Elle a aidé des journalistes à préparer des

articles sur différents aspects de Statistique Canada. Les sections de dessin et des arts graphiques ont toutes deux offert leurs services aux divers secteurs de Statistique Canada afin de les aider dans leurs programmes respectifs.

La Section des publications a été créée en vue de coordonner l'impression des principaux ouvrages de Statistique Canada, notamment *l'Annuaire du Canada* et *Canada*. D'autres ouvrages importants seront ajoutés à la liste à mesure que le programme prendra de l'expansion.

L'Annuaire du Canada est un ouvrage de référence de base embrassant tous les aspects de la vie sociale, économique et politique du Canada. Cette année, on a modifié la présentation et on a introduit dans la division un matériel de traitement des textes. L'ouvrage *Canada* présente à l'intention du public une brève rétrospective des événements récents dans le domaine social et culturel au Canada.

Bibliothèque

Même si elle constitue avant tout un instrument de recherche à l'usage du personnel et des spécialistes de Statistique Canada, la bibliothèque de Statistique Canada joue un rôle important comme source statistique pour

Les Services de l'assistance-utilisateurs se sont étendus cette année à tout le Canada, s'attachant particulièrement à mettre sur pied un service efficace au bénéfice des utilisateurs de statistiques et à entretenir des relations avec les organismes des provinces. Voici en quoi consistent les principales fonctions de la division: — fournir des services de renseignements et d'assistance aux utilisateurs et aux fournisseurs de la bibliothèque.

Services de l'assistance-utilisateurs

En 1973-74, on a progressé sensiblement vers la mise en oeuvre d'une nouvelle politique de Statistique Canada visant à mieux contrôler les collections; à cette fin, on a pris les mesures suivantes: création d'un budget consolidé pour l'achat de livres; transfert à la bibliothèque principale de plusieurs collections de livres et de revues qui se trouvaient dans les divisions; petites collections d'ouvrages à la disposition de tous les utilisateurs, placées un peu partout à travers le Canada; et amélioration des catalogues de la bibliothèque. On a renouveau la qualité et étendu la portée des services de référence de la bibliothèque.

Formation TED

Le Groupe de l'administration des données a mis en application plusieurs systèmes et procédures visant à la sécurité et à l'intégration des ressources en données du Bureau : un système de mots de passe pour les fichiers de bandes magnétiques, des procédures d'identification de l'ordinateur-utilisateur et un système de stock pour les fichiers de données lisibles à la machine. Ce dernier a commencé à fonctionner en avril et s'insère dans le cadre des opérations du S370/165, enregistrant la création de tous les nouveaux fichiers lisibles à la machine et en tenant à jour les statistiques de leur utilisation. En collaboration avec la Division des systèmes généraux d'enquêtes, le groupe a commencé à travailler sur un projet d'élaboration d'un dictionnaire.

Groupe de l'administration des données

un temps de réimpression réduit. au point à l'intérieur du Bureau. Les deux ont entrée et un système de contrôle conçu et mis au point à l'intérieur du Bureau. Les deux ont clusif utilisant des tableaux de décision comme la division a acquis plusieurs nouveaux instruments, dont un ensemble de programmes ex-En ce qui concerne le contrôle des données, du projet de mise en tableau.

La sous-division des systèmes de la statistique des entreprises a retenu une nouvelle approche organisationnelle dans le domaine de la conception de systèmes d'enquête automatisés. Au lieu d'affecter une équipe à une enquête, les tâches de l'enquête seront assignées à différentes équipes de développement des fonctions. Ainsi, les connaissances techniques seront approfondies et l'expérience et la formation acquises permettront d'améliorer les tâches d'entretien. Les équipes sont celles de la constitution du fichier principal de la division, celle du contrôle des données quantitatives et celle du projet de mise en tableau.

Travaux d'approches généraux de développement

des problèmes et des besoins. En fin d'année, plusieurs applications importantes de la technologie de la base de données étaient mises en pratique : un système intégré de la statistique de l'état civil, prototype de systèmes semblables qui seront élaborés éventuellement, et un fichier central de gestion automatisée pour le recensement de 1976 ont été mis au point.

Les efforts réalisés vers le processus de mise en tableau, et de publication se sont accélérés ainsi que vers l'étape suivante qui sera l'automatisation du projet de mise en tableau. À cette fin, on utilisera une unité d'affichage graphique qui simulera de façon interactive des sorties précises et qui générera automatiquement par la suite un programme de gestion pour transmettre les instructions nécessaires à l'appareil périphérique de photo-composition. Les utilisateurs auront ainsi une plus grande marge de manœuvre pour l'établissement de la composition des publications.

La sous-division des systèmes de la statistique des entreprises a retenu une nouvelle approche organisationnelle dans le domaine de la conception de systèmes d'enquête automatisés. Au lieu d'affecter une équipe à une enquête, les tâches de l'enquête seront assignées à différentes équipes de développement des fonctions. Ainsi, les connaissances techniques seront approfondies et l'expérience et la formation acquises permettront d'améliorer les tâches d'entretien. Les équipes sont celles de la constitution du fichier principal de la division, celle du contrôle des données quantitatives et celle du projet de mise en tableau.

Dans le domaine de la technique, on a inauguré un cours à jour sur la formation en opérations. Le Bureau a acheté auprès de IBM un cours de formation en atelier qui a été adapté à ses besoins. Les avantages ont été nettement profitables.

Les activités de la bibliothèque TED se sont développées et on a prévu un autre service qui consiste à faire circuler une table des matières de périodiques TED. Il est possible de se procurer sur demande des réimpressions.

Mentionnons au nombre des nouveaux systèmes informatiques. L'analyse des données au personnel à l'heure du midi. Dans le domaine de la technique, on a inauguré un cours à jour sur la formation en opérations. Le Bureau a acheté auprès de IBM un cours de formation en atelier qui a été adapté à ses besoins. Les avantages ont été nettement profitables.

Les activités de la bibliothèque TED se sont développées et on a prévu un autre service qui consiste à faire circuler une table des matières de périodiques TED. Il est possible de se procurer sur demande des réimpressions.

Systèmes informatiques et traitement des données

- Division de la recherche en automatisation et de la vérification, de la planification
 - Division du traitement des données
 - Système généraux d'enquêtes
 - Division des systèmes informatiques
- Cette direction fournit des systèmes généraux (T.E.D.) ainsi que des services de production aux diverses divisions de Statistique Canada chargées de la collecte des données et de la diffusion de l'information. Ces activités sont étroitement reliées à des recherches internes et poussées visant à l'élaboration des systèmes généraux de traitement des enquêtes et de ses composantes.

Division de la recherche en automatisation, de la planification et de la vérification

Cette division a été créée cette année pour donner au Bureau une fonction de planification

du T.E.D. plus solide. En ce qui concerne la conversion des données, la division s'est surtout attachée au système de reconnaissance optique des caractères (R.O.C.) en effectuant une étude de rentabilité d'emploi du matériel et des systèmes et en évaluant le matériel et les systèmes déjà existants. Ces travaux ont abouti à l'installation du lecteur de documents IBM 1288.

La division continue de donner des conseils techniques sur la photo-composition, et elle a collaboré avec d'autres groupes à des recherches spéciales sur le traitement des mots, la sécurité du T.E.D., l'utilisation du terminal d'ordinateur ainsi que sur les moniteurs de transmission des données.

Division du traitement des données
Le système du bureau est un IBM S370/165

ayant une capacité de mémoire de deux millions de multiplets et une unité de disques pouvant contenir 3,6 milliards de multiplets. Les périphériques connexes comprennent un réseau de terminaux intégrés permettant l'accès à l'ordinateur pour un grand nombre d'utilisateurs de Statistique Canada. Le centre de traitement de l'information fonctionne vingt-quatre heures sur vingt-quatre du lundi au vendredi, et huit heures par jour le samedi et le dimanche.

Les questionnaires du recensement comp- tent encore pour une importante propor- tion de l'utilisation des systèmes informatiques, et on a également mis au point des procédures de traitement des données pour le recensement Canada, ce réseau devant servir principalement des données pour l'enquête sur la population de systèmes de regroupement et de transmission de données pour l'enquête sur la population. Les possibilités de conversion des données de la division se sont accrues sensiblement avec l'installation du lecteur optique IBM 1288.

Division des systèmes généraux

d'enquêtes

La mise au point du système de contrôle

GEISHA compte parmi les activités importantes des systèmes d'enquêtes. Elle constitue une application automatisée du programme de contrôle et d'imputation mis au point par L. Fellegi et T. Holt et servira à contrôler les données de 1974 et celles du recensement de la population de 1976. Le système est souple et peut servir à la plupart des enquêtes de Statistique Canada. Des programmes généraux de stratification, de choix d'échantillon et d'estimation des données d'enquête ont été mis en oeuvre dans le cadre d'un projet à long terme visant à l'élaboration d'un système général intégré d'en- quêtes. Une équipe de statisticiens venant de plusieurs divisions du Secteur des services statistiques ont défini les particularités militio- naires. La division a également travaillé à l'élabora- tion de constituants d'un système de gestion de base de données. Le succès de STATAK — un système de stockage, d'extraction et de mise en tableau des données — a encouragé le dévelop- pement de systèmes plus généraux de gestion de base de données pour accéder à des données statistiques. En corollaire à ces travaux, la division met actuellement au point un système de dictionnaire des données.

Division des systèmes informatiques

La division a concentré ses efforts sur des

recueillir des renseignements sur les professions les entreprises. Cette enquête est destinée à compléter un programme d'interviews dans lequel on a demandé d'autres renseignements sur la distribution des salaires.

En plus de l'enquête courante par les postes spécialisés, les personnes des bureaux régionaux a collecté plus de 60,000 déclarations d'entre-prises portant sur un vaste éventail de demandes des déclarations en souffrance. Au cours de l'année, le personnel des bureaux régionaux a enquêté sur les entreprises grâce à la collecte

La division a étendu la portée de son travail à des claviers pour l'entrée des données, des imprimantes ainsi que des données, des personnes ainsi que des données. Les personnes des bureaux régionaux ont installé des claviers pour l'entrée des données, des personnes ainsi que des données.

Le travail d'élaboration de la nouvelle enquête sur la population active s'est accéléré. Les personnes des bureaux régionaux ont installé des claviers pour l'entrée des données, des personnes ainsi que des données. Les personnes des bureaux régionaux ont installé des claviers pour l'entrée des données, des personnes ainsi que des données.

La division a poursuivi la réorganisation de son bureau central et de ses huit bureaux régionaux afin de répondre aux demandes croissantes qui lui sont faites, étant l'unique service de collecte des données sur le terrain de Statistique Canada.

Division des opérations régionales

La division a poursuivi la réorganisation de son bureau central et de ses huit bureaux régionaux afin de répondre aux demandes croissantes qui lui sont faites, étant l'unique service de collecte des données sur le terrain de Statistique Canada.

On a également commencé à travailler sur l'enquête sur les étudiants du cours secondaire et sur l'enquête sur les écoles au niveau postsecondaire menées toutes les deux pour le Secrétariat d'Etat.

Le personnel de la division continue à participer à l'enquête sur la main-d'œuvre hautement qualifiée et contribue très largement au système de vérification informatique en établissant des systèmes de contrôle qualitatif et en traitant les problèmes méthodologiques liés aux procédures sur l'estimation de la variance et de la pondération. On a commencé à travailler à la conception des projets d'évaluation liés à la qualité des données d'enquête.

La division a étendu la portée de son travail à des claviers pour l'entrée des données, des personnes ainsi que des données. Les personnes des bureaux régionaux ont installé des claviers pour l'entrée des données, des personnes ainsi que des données.

La division a poursuivi la réorganisation de son bureau central et de ses huit bureaux régionaux afin de répondre aux demandes croissantes qui lui sont faites, étant l'unique service de collecte des données sur le terrain de Statistique Canada.

Le personnel de la division continue à participer à l'enquête sur la main-d'œuvre hautement qualifiée et contribue très largement au système de vérification informatique en établissant des systèmes de contrôle qualitatif et en traitant les problèmes méthodologiques liés aux procédures sur l'estimation de la variance et de la pondération. On a commencé à travailler à la conception des projets d'évaluation liés à la qualité des données d'enquête.

La meilleure méthode consistait à laisser la enquête un ruban-mesure et à communiquer avec lui - personnellement ou par téléphone - quelques jours plus tard. Cette méthode a donc été adoptée. L'enquête descriptive sur l'agriculture, menée en juillet, prenait en compte un échantillon de 6,700 fermes à travers le pays: tout le travail sur le terrain était terminé au bout de deux semaines. L'échantillon de l'E.D.A. de l'an prochain sera entièrement nouveau et on y ajoutera 8,000 fermes. Une autre "première" dans le domaine des opérations de collecte des données a été l'enquête sur le camionnage international. Un personnel était en fonction 24 heures par jour pendant 7 jours à 15 postes frontalières, interviewant les camionneurs entrant ou quittant le Canada. On a rempli en tout 45,000 questionnaires. Parmi les autres enquêtes, on peut citer l'enquête sur les finances des consommateurs comprenant 12,000 ménages, une enquête pilote pour l'enquête sur temps improductif, qui est toujours envisagée, ainsi que l'enquête courante sur les points de vente qui comporte une charge de travail de 1,800 segments.

l'amélioration du système.

Il a été proposé de refondre l'enquête trimestrielle sur les sociétés industrielles et les institutions financières et le travail se poursuit en vue de la mettre à l'exécution en 1974.

La division continue également d'étudier les possibilités de mettre sur pied un système informatique en vue d'identifier les complexes de propriété entre corporations et de calculer le niveau de propriété et de contrôle par des non-résidents.

Division du travail

Enquête sur les postes vacants

Au cours de la période considérée, on a entrepris plusieurs projets tant pour améliorer l'efficacité statistique que pour réduire le coût de l'enquête: taille de l'échantillon réduite, interviews téléphoniques au lieu d'interviews personnelles et nouvelles techniques pour s'occuper des cas de réponse particuliers.

Enquête sur la profession des salariés

La méthodologie et les systèmes destinés à l'enquête actuelle sont presque achevés et on espère produire les totalisations plus tard cette année. On a commencé le travail préliminaire en vue d'établir la taille de l'échantillon de l'enquête pour 1975 en se fondant sur les résultats de 1973.

Enquêtes sur l'emploi (ES1 et ES2)

Les nouvelles versions du sous-système d'imputation et de contrôle informatiques (SSIC1) et du sous-système de totalisations ont été appliquées. On procède actuellement à la construction d'un nouveau programme de couplage FPD — ES1 et à la révision des sous-systèmes de totaisons ES1 — SSIC1. On a terminé le rapprochement des estimations pour le ES2 avec d'autres estimations d'enquête.

Division des transports et des communications

Bulletin statistique, 1973 (Enquête repère)

Le Bulletin statistique pour 1973 a été réalisé afin de présenter des données sur l'emploi et les gains dans le secteur des petites entreprises, de l'éducation, de la santé, du bien-être et des administrations publiques, en plus de données sur l'emploi provenant du secteur des grandes entreprises. Quelque 260,000 questionnaires ont été postés et les suivis ont été faits par téléphone et par interviews personnelles. Les estimations devraient sortir vers la fin de 1974.

La division a participé à une évaluation en eau recueillies et demandées par les ministères

et organismes du gouvernement fédéral.

Projets à coûts recouvrables

Comité d'étude des mesures fiscales (CMF)

La première étape de cette enquête, qui vise à établir les conséquences de certaines politiques fiscales du gouvernement sur l'économie, a été achevée. Le travail préliminaire pour la dernière étape de l'enquête est maintenant terminé.

Enquête sur l'amortissement du coût en capital

(ministère des Finances)

Cette enquête s'inscrit dans le cadre d'une étude sur l'amortissement du coût en capital entreprise par le ministère des Finances. La première étape de l'enquête a porté sur la conception et la sélection de l'échantillon. Dans la seconde étape, on s'attachera à l'exploitation des questionnaires, ce qui comprendra la totalité des résultats et la rédaction des bulletins méthodologiques nécessaires.

Division des méthodes de recensement et d'enquêtes "institutions"

Cette division assure des services en matière de méthodologie (conception et évaluation d'enquêtes) aux divisions de la Direction du recensement et à la Direction des institutions et des finances publiques du Secteur des ménages et institutions, à la Division de l'agriculture et à la Division du traitement des données. Elle participe également à divers projets de recouvrement des coûts et offre un service consultatif sur les sujets liés à la méthodologie.

Un travail de recherche a été effectué sur la mesure des erreurs de réponses, sur l'estimation des biais et de l'erreur quadratique moyenne de l'estimation par la méthode des quotients de rangs.

Direction du recensement

En 1973-1974, la Division des méthodes de recensement et d'enquêtes "institutions" (DMREI) a participé aux programmes suivants de la Direction du recensement.

Evaluation du recensement de 1971

Une contre-vérification des documents portant sur le dénombrement incomplet du recensement a été effectuée et plusieurs rapports ont été rédigés sur la variance de réponse ont été caractérisés des personnes oubliées. Des chiffrés pour toutes les données de la Formule 2A du recensement et le travail s'est poursuivi pour ce qui est des données de la Formule 2B. Un système a été établi pour le projet de variance du codeur. Des rapports définitifs ont été livrés. Un travail considérable a été effectué à partir du rapprochement recensement-EPA pour mesurer les erreurs de cou-

ture. Un rapport a également été rédigé sur cette question. Une étude distincte de certaines erreurs de réponse a été effectuée à partir de la contre-vérification des documents.

Planification du recensement 1974-76

Le personnel a collaboré à la méthodologie et aux procédures de planification dans les domaines suivants du recensement de 1976: conception et contenu du questionnaire, procédures de dénombrement, dont la rémunération du représentant du recensement, établies à partir des résultats de l'expertise des opérations de 1971, opérations de dépouillement au bureau régional, dépouillement spécial du Bureau central, systèmes de saisie et de contrôle qualitatif des données et élaboration et essai du système GEISHA (Système généralisé de vérification et d'imputation utilisant la méthode dite du "Hot Deck") et procédures de pondération.

Contrôle qualitatif du dépouillement du recensement

Le programme biennal d'évaluation et de développement des procédures de contrôle qualitatif (C.Q.) du dépouillement au bureau régional et sur le terrain a pris fin cette année. Les procédures de contrôle qualitatif sur le terrain pour le recensement d'essai de 1974 comprennent des procédures d'échantillonnage améliorées et élargissent le champ d'enquête pour englober des lacunes connues dans les procédures de contrôle qualitatif du recensement de 1974 au bureau régional étaient très différentes de celles du recensement de 1971 en raison de l'utilisation de graphiques de contrôle cumulatifs.

Evaluation du recensement de 1974

On a conçu une série de projets d'évaluation destinés à mettre à l'épreuve les méthodes de mesure des aspects de la qualité des données. L'un des projets expose une nouvelle façon d'obtenir les taux de réponse et les autres sont destinés à mesurer les effets de la saisie des données, du contrôle et des imputations sur les données du recensement. On a également posé une méthode systématique afin de mesurer la qualité des données du recensement de 1976.

Autres travaux relatifs au recensement

En 1973, on a présenté un rapport sur la possibilité de créer et de tenir à jour un registre d'adresses entre les recensements. Les résultats ont révélé qu'il est possible de tenir à jour un registre d'adresses complet et précis si l'on utilise plus d'une source de renseignements. Toutefois, sur le plan opérationnel, on sait que l'on pourra utiliser à l'avenir une seule source de renseignements — le bureau de poste — Une autre étude a été entreprise à Regina et à Trois-Rivières afin de vérifier la précision et la fiabilité de cette source. Les résultats devraient être disponibles à la fin de 1974.

Le personnel a fourni des services consultatifs à Statistique Canada et à d'autres ministères pour les enquêtes suivantes:

Enquête	Ministère
---------	-----------

Programme d'initiatives locales
Enquête sur les logements (enquête pilote)
Étude sur le trafic routier aux frontières des E.-U. (1973-74)
Enquête sur les entrées et sorties des voyageurs des lignes aériennes étrangères
Conception de l'échantillon — Université de la Saskatchewan
Programme de réinstallation (T.-N.)
EMR — documentaires télévisés
Enquête sur les logements (enquête principale)
Nutrition Canada
Enquête sur les voyages des Canadiens, 1971
Programme fédéral-provincial, 1971
Enquête sur le tourisme en Alaska (autoroute)
Participation des citoyens à la culture populaire
Banque de données sur les loisirs
Programme de prêts pour la création d'emplois

Secrétariat d'État
SCHL
Transports
Université de la Saskatchewan
Expansion économique régionale
Énergie, Mines, et Ressources
SCHL
Santé nationale et Bien-être
Tourisme
Finances
Gouv. des Territoires du Nord-Ouest
Secrétariat d'État
Ministère d'État aux Affaires urbaines
Finances

Les services fournis contre remboursement comprennent un vaste programme de consultation méthodologique, l'établissement de tailles d'échantillons et des méthodes d'estimation, la stratification et le choix d'échantillons, la conception de formules de contrôle pour le travail sur le terrain, des méthodes d'imputation et de pondération, l'évaluation de résultats, la participation à la gestion d'enquêtes et l'administration de projets.

Divers

La division a mis sur pied et présenté un cours d'introduction à la théorie de l'échantillonnage destiné aux statisticiens subalternes. Un cours avancé a également été offert.

Méthodes d'enquêtes "entreprises"

Cette division est chargée des services méthodologiques d'enquêtes et, dans certains cas spéciaux, de la conception et de l'élaboration de systèmes pour le Secteur de la statistique des entreprises de Statistique Canada.

Les paragraphes qui suivent présentent un résumé des services que cette division fournit à d'autres organes.

Fichiers principaux du registre des entreprises et des divisions

La Sous-division des systèmes a consacré la plus grande partie de son travail à mettre sur pied des systèmes mécanographiques nécessaires pour le registre des entreprises et les divisions connexes. Le registre existe depuis plus de deux ans et on a continué à améliorer son contenu, à mettre sur pied les systèmes mécanographiques nécessaires et à élaborer des techniques de couplage de documents. Dans un très proche avenir, on intégrera au registre les renseignements pro-

venant des déclarations d'impôts des sociétés et des particuliers; on étudie toujours la possibilité d'utiliser d'autres fichiers de Revenu Canada. On a commencé à examiner l'utilisation de systèmes de bases de données et des techniques qui y sont rattachées tant pour le registre des entreprises que pour les systèmes connexes.

Les systèmes des fichiers principaux des divisions sont sur le point d'être introduits dans les Divisions du travail et du commerce. Ces systèmes indépendants s'appliquent à la partie du registre qui touche les opérations d'enquête de chaque division. Ces systèmes reçoivent automatiquement les mises à jour du registre (pour la plupart des renseignements de Revenu Canada) et en transmettent des divisions au système du registre. On prévoit mettre sur pied des systèmes semblables pour les divisions des industries manufacturières, de la construction, des transports et des finances des entreprises.

Profils (Division des profils et des registres d'entreprises)

Cette division joue un rôle de premier plan dans l'élaboration de systèmes et de procédures normalisées (systèmes informatiques et autres) pour les profils d'entreprises en vue d'établir des catégories arbitraires de renseignements. Ces systèmes et procédures portent sur toute l'activité des profils d'entreprises, de la coordination, à la préparation des manuels d'instructions et à l'enregistrement des renseignements pertinents dans le registre des entreprises, dans les fichiers principaux des divisions et ailleurs.

Systèmes de préparation d'enquêtes

Les systèmes de préparation d'enquêtes que possèdent un FPD. Ces systèmes recouvrent la

sélection d'échantillons, la création de fichiers de contrôle pour une enquête postale particulière, la vérification des questionnaires renvoyés par les enquêtes et le suivi des non-répondants. Ils permettent également d'effectuer d'autres recherches et perfectionnements dans la conception des systèmes appliqués aux enquêtes auprès des entreprises et d'évaluer ces dernières.

Accessibilité des données fiscales

Ce programme vise à obtenir des données sur les entreprises individuelles destinées à la conception d'enquêtes et de recensements qui réduisent le fardeau de réponse imposé aux petites entreprises. Les résultats d'un projet pilote effectué à Winnipeg ont révélé qu'il y aurait lieu d'effectuer un contrôle qualitatif du codage, et c'est pour cette raison qu'il a été incorporé dans le programme principal.

En 1974, première année d'un programme de quatre ans, on a choisi un échantillon de formules T1. Au cours des prochaines années, on choisira un sous-échantillon à partir des formules déjà contenues dans l'échantillon et d'un autre groupe tiré du reste de l'univers. Le cadre d'échantillonnage qui en découlera comprendra des propriétaires individuels et des associés d'entreprises individuelles avec ou sans salariés.

Division du commerce et des services

Nouvelle enquête sur le commerce de détail
Cette division a aidé à maintenir le système actuel, à améliorer les communications avec le registre des entreprises et à mettre sur pied un fichier principal divisionnaire.

Enquête sur les marchandises vendues au détail, 1974
Même si l'on a dû reporter la date prévue de cette enquête de 1974 à 1975, le travail d'élaboration de spécifications concernant la stratégie de suivi des non-répondants et de mise au point de modèles de coûts pour les enquêtes auprès des entreprises se poursuit.

Recensement de 1981 du commerce et des services
En préparation au recensement de 1981 du commerce et des services, il est prévu d'effectuer des tests préliminaires sur les méthodes et les systèmes.

Division des finances des entreprises (CALURA)

L'enquête annuelle, que l'on avait considérablement modifiée, a fait l'objet d'un contrôle. On a également participé à la mise à jour et à

- **Elaboration d'enquêtes ménages**
- **Méthodes d'enquêtes entreprises**
- **Méthodes de recensement et d'enquêtes institutions**
- **Opérations régionales**
- **Systèmes informatiques et traitement des données**

Ce secteur participe aux opérations de collecte et de rassemblement des données, ce qui comprend les méthodes d'enquête, le travail d'enquête sur le terrain et le traitement des données.

Elaboration d'enquêtes "ménages"

Cette division s'occupe de fournir des données méthodologiques en vue de la conception et de la tenue d'enquêtes-échantillon de ménages; son travail porte sur les sujets suivants: enquête sur la population active, enquêtes sur le revenu et les dépenses des consommateurs, recherche méthodologique, système général d'enquête, consultation et enquêtes spéciales.

Enquête sur la population active

La division a travaillé à la mise sur pied d'un système normalisé de production qui servira à établir une base plus scientifique pour l'évaluation des interviews et à produire les données essentielles aux études sur le comportement des interviewers.

La première étape du programme téléphonique expérimental entrepris l'an dernier est franchie et un programme visant à étendre le nombre d'unités de réponse des enquêtes est en cours d'élaboration. On estime que l'usage du téléphone dans les régions désignées réduira d'environ 20 % les coûts d'interview. La seconde étape consiste à mettre à l'essai un système téléphonique centralisé et à fournir des spécialistes pour les diverses opérations. Les effets de cette procédure sur les mesures qualitatives, comme le coût et la non-réponse, et sur les caractéristiques de la population active tels

le taux de chômage et d'activité seront étudiés plus tard.

La division s'est également penchée sur la question des fluctuations de la non-réponse et du taux de glissement afin d'en cerner les raisons.

Le système de variance-covariance, qui permet d'obtenir des estimations sur les coefficients de variation, doit être révisé; on veut ainsi le rendre plus souple afin d'établir des indices de stratification et de faire des études de variance sur un plus grand nombre de caractéristiques.

Les travaux concernant la méthodologie de la nouvelle enquête sur la population active se poursuivent. La stratification et la sélection des UPE, les comptages sur le terrain, la formation et le choix des groupes et des grappes ont été terminés au début de 1974 et on prévoit faire un essai parallèle de la NEPE et de l'EPA en 1975.

Les données de la nouvelle enquête sur la population active passent par un certain nombre d'étapes distinctes, chacune nécessitant une procédure de contrôle. Les étapes ont été identifiées et des spécifications sont en cours de préparation. On a effectué une enquête pilote afin de déterminer s'il est possible d'inclure les réserves

indiennes dans l'EPA. En réponse à une demande de la Saskatchewan, on a procédé à l'élaboration et au choix d'un échantillon qui servira à étudier la tendance du chômage dans cette province.

Les deux méthodes proposées pour établir une procédure généralisée de pondération pour les enquêtes supplémentaires sur la population active ont été évaluées. Il a été décidé d'intégrer la mise au point de la procédure d'estimation au nouveau système de traitement des données. Il sera possible, dans l'interval, d'obtenir les coefficients de pondération courants des enquêtes supplémentaires en adaptant ceux pour la population active au taux de réponse.

Le personnel de la division a procédé au choix de l'échantillon et à l'établissement d'une méthode de pondération pour l'enquête sur les dépenses des familles (il s'agit d'une enquête de 12 mois en 1974 sur les dépenses alimentaires par voie de carnets d'achats et d'une enquête de rappel prévue pour 1975) ainsi que pour les enquêtes sur les finances des consommateurs et celle sur l'équipement des ménages. On a affecté en permanence un spécialiste en méthodologie à ces enquêtes. L'échantillon de l'enquête par voie de carnets et de l'enquête de rappel comprenait environ 12,000 ménages répartis dans 14 villes du Canada.

retardent leur inscription dans les établissements d'enseignement postsecondaire afin de pouvoir voyager ou de poursuivre certains intérêts personnels. Aucune de ces deux explications n'est probablement suffisante.

En ce qui concerne le personnel enseignant à plein temps, les fluctuations ont suivi de près celles des effectifs mais, pour la plupart, les augmentations ont été plus élevées et la régulation des taux de croissance, moins rapide; si l'on compare les taux annuels d'augmentation des niveaux primaires et postsecondaires, il apparaît que l'augmentation du nombre d'inscriptions dans les établissements d'enseignement postsecondaire est en général plus de deux fois supérieure à celle pour les écoles primaires et secondaires, même si ces deux pailiers ont accusé une diminution du taux annuel d'augmentation. C'est vers le début des années 1970 que ces différences ont, en général, commencé à se réduire. On prévoit qu'en 1974-75 les effectifs du primaire-secondaire connaîtront une baisse annuelle absolue de 2 % et ceux du personnel enseignant à plein temps, de 1 %. Simultanément, le nombre d'enseignants à plein temps devrait rester à peu près inchangé, et on prévoit de faibles augmentations des inscriptions dans les écoles postsecondaires.

Au cours de 1973-74, la division a entrepris une étude en profondeur et une restructuration de son programme de publication en ajoutant de nombreux titres et en modifiant des publications existantes.

Les réalisations dans la division pendant l'année observée sont présentées par domaine. La Sous-division de l'éducation, créée en 1973-74, se compose de trois sections reposant essentiellement sur les niveaux d'enseignement: primaire-secondaire, postsecondaire et formation professionnelle — éducation permanente. La planification, l'élaboration et la mise en oeuvre de systèmes individuels de renseignements ont constitué les principales sphères d'activité. Le Système d'information statistique sur la clientèle universitaire (SISCU) qui se fonde sur les dossiers mécanographiques d'entrée et de sortie des établissements, est le premier système en son genre. On travaille actuellement à la mise au point d'un projet semblable pour les élèves des collèges, le personnel enseignant des universités et des collèges ainsi que pour les enseignants aux niveaux primaire et secondaire. La création d'une section distincte portant sur la statistique de la formation professionnelle et de l'éducation permanente fait suite à la croissance gigantesque de ces domaines et à leur importance au sein des objectifs d'ensemble de l'enseignement. La section a terminé les plans de programmes statistiques visant à décrire la nature et l'étendue des programmes de formation professionnelle et d'éducation permanente afin d'établir le degré de participation des Canadiens à ces programmes et d'étudier les facteurs de participation ou de non-participation.

La Section du primaire-secondaire a entre-

pris de relier aux données sur l'éducation qu'elle recueillait les données démographiques provenant du recensement du Canada de 1971. A la statistique des sciences, on a mis sur pied un nouveau programme destiné à produire et à publier des statistiques nationales agrégées sur la recherche et le développement découlant des enquêtes menées par la section. Les données portent sur la recherche et le développement effectuées en Alberta et en Nouvelle-Ecosse afin d'améliorer la base de données sur les activités scientifiques des administrations. On espère que les techniques, les définitions et les concepts aideront d'autres administrations provinciales.

Dans le secteur de l'industrie canadienne, les enquêtes de pair avec une enquête sur les réalisations techniques. L'échantillon de 1973 se composait des 100 plus importants centres de recherche et de développement, de tous les centres de l'industrie des pâtes et papiers et d'un certain nombre de services de moindre envergure. On a diffusé les premières données afin de recueillir des commentaires.

La Sous-division de la culture, créée en 1973-74, se compose de trois sections: la Section des beaux-arts et des mass media, la Section des institutions culturelles et la Section des voyages, du tourisme et des loisirs. Les deux premières remplacent la Section de l'information culturelle.

La Section des beaux-arts et des mass media a entrepris deux nouvelles enquêtes. La première, qui porte sur l'édition, consiste en un relevé de tous les livres canadiens publiés ou réimprimés en 1972 et 1973. On cherche ainsi à connaître le genre de livre, l'auteur, la langue d'édition et le volume des ventes. La seconde, qui a trait aux spectacles, analyse les principales compagnies théâtrales.

La Section des institutions culturelles a étendu le champ de son enquête sur les musées, les galeries d'art et les établissements connexes. Elle travaille également à la révision de ses questionnaires sur les bibliothèques.

La Section des voyages, du tourisme et des loisirs a remanié son condensé en y ajoutant de nouveaux chapitres et un plus grand nombre de statistiques.

La sous-division a commencé à étudier la possibilité d'effectuer une enquête permanente nationale sur l'emploi du temps afin de connaître les activités de divers groupes et d'analyser en profondeur leur participation à certaines activités.

La Division de la santé se compose de 8 sections

Division de la santé

principales: Statistique de l'état civil, Hygiène mentale, Hygiène publique, Epidémiologie, Hôpitaux, Installations de soins spéciaux, Soins primaires et Main-d'oeuvre sanitaire, qui produisent un large éventail de statistique sur la santé. La Section de la statistique de l'état civil est chargée de produire des statistiques nationales sur les naissances, la mortalité, les décès, les mariages et les divorces en se fondant sur les dossiers des bureaux provinciaux d'enregistrement de la statistique de l'état civil. En collaboration avec le ministère fédéral de la Justice, la section recueille également des statistiques sur le divorce. Elle publie pour les provinces une série de bulletins annuels et des totalisations détaillées sur les naissances, la mortalité, les décès et les mariages. Elle fournit également des services de secrétariat pour le Conseil de la statistique de l'état civil du Canada, qui se compose des bureaux d'enregistrement provinciaux de ce conseil sont d'établir, d'étudier et de faire des recommandations sur les aspects juridique, administratif et statistique de l'enregistrement des actes d'état civil au Canada.

Les nouveaux documents normalisés pour l'enregistrement de ces renseignements ont été adoptés par 9 des 12 provinces et territoires. On s'attend à ce que les autres régions utilisent les nouvelles formules vers le 1^{er} janvier 1975. La section a également conclu des ententes avec six provinces en vue de revoir les accords de partage de frais.

La section produit des données pour un certain nombre d'études épidémiologiques en treprises par divers chercheurs. En outre, elle effectue des études analytiques sur certains aspects spécialisés de l'épidémiologie et de la démographie.

La Section de l'hygiène mentale a produit des statistiques sur les malades hospitalisés en psychiatrie au Canada et a entrepris un nouveau programme visant à recueillir des données sommaires sur les malades en consultation externe. Le septième rapport annuel préliminaire sur l'hygiène mentale a paru en janvier 1974 en annexe à l'édition de mars-avril de "Hygiène mentale au Canada", publiée par Santé et Bien-être Canada. Le volume 1, *Admissions et radiations des institutions, 1971*, a été publié peu de temps après. Un troisième bulletin annuel intitulé *Volume 2, Les malades inscrits dans les établissements, 1966-69*, est en cours de préparation et doit sortir en 1974.

Au cours de l'année, la Section de l'hygiène publique s'est scindée en 2 sections: Epidémiologie et Morbidité hospitalière. Cette dernière est chargée de la statistique hospitalière sur les malades en consultation interne et sur les avortements thérapeutiques. Trois volumes sur la statistique des malades hospitalisés paraissent tous les ans, dont deux sur les diagnostics et un sur les opérations effectuées. Des études spéciales ont été entreprises en vue de répondre aux utilisateurs qui demandaient des renseignements détaillés ou des données inédites. En

Direction des institutions et des finances publiques

- Division des finances publiques
- Division de l'éducation des sciences et de la culture
- Division de la santé
- Division de la statistique judiciaire

cutée.

La division a poursuivi son travail de promotion concernant l'adoption par les municipalités de systèmes types de classification des comptes et engagé des discussions avec les systèmes de classification analogues.

Division de l'éducation, des sciences

et de la culture

Il s'est produit ces dernières années dans le domaine de l'éducation de profondes modifications qui se sont répercutées à la fois sur les effectifs et le personnel enseignant à plein temps. Les faibles taux de natalité enregistrés au milieu des années 1960 ont commencé à influencer sur le niveau des effectifs du primaire pendant les années 1970. En 1974-75, on s'attend à ce que les effectifs à plein temps des écoles primaires et secondaires redescendent aux niveaux de 1968-69.

Ces baisses n'ont toutefois pas touché le niveau postsecondaire, les collèges communautaires ayant enregistré la majeure partie de l'augmentation. Les universités ont connu, pour leur part, des hausses bien moindres. Deux hypothèses tentent d'expliquer ce phénomène en premier lieu, les universités n'ayant plus un attrait aussi grand sur un nombre croissant d'étudiants et, en second lieu, les étudiants

dépenses de l'année suivante.

La division a travaillé à l'élaboration d'une série sur la statistique trimestrielle de la gestion financière des administrations publiques en vue de sa publication en 1974-75.

Une enquête visant à déterminer les relations des entités gouvernementales au niveau local a été exécutée pour les régions métropolitaines de toutes les provinces sauf celles du Québec et de l'Ontario, qui mènent leur propre enquête. Les questionnaires devraient faire l'objet d'une analyse en 1975-76.

On a enregistré des progrès dans l'élaboration de systèmes informatiques destinés au stockage des données des opérations sur obligation non garanties des municipalités. Ces systèmes devraient être prêts pour 1975-76.

Afin d'accélérer le rassemblement des renseignements sur les opérations du secteur des administrations du système des comptes nationaux, un système de traitement électronique a été mis au point et son application est prévue pour l'année prochaine.

La division a établi une structure destinée à l'analyse trimestrielle détaillée des opérations du secteur des administrations des comptes nationaux. Cette structure sera publiée l'année prochaine.

Une enquête trimestrielle sur les recettes et les dépenses des conseils scolaires a été exé-

Cette direction prépare une grande variété de statistiques sur l'éducation, la santé, la science, la culture, la justice, le bien-être et les finances publiques. Les principales sources de données sont constituées par les dossiers administratifs des écoles, collèges, hôpitaux, prisons, tribunaux et ministères fédéraux.

Le programme de publication de la direction est très complet, et il fournit des renseignements sur les inscriptions, les enseignants, professeurs, l'état civil, les prestataires du bien-être social, la morbidité, l'emploi dans la fonction publique et la criminalité.

Division des finances publiques

L'une des principales réalisations de la Division des finances publiques en 1973-74 a été sa participation à la mise sur pied de structures pour la classification normalisée des comptes des opérations financières de l'Etat. Elle a aussi joué un rôle important au sein du comité fédéral interministériel de la classification et du codage des recettes, des dépenses, de l'actif et du passif de l'administration fédérale et au comité de l'O.C.D.E. qui a travaillé à l'établissement d'une structure internationale de classification normalisée des dépenses publiques.

La publication *Finances de l'administration publique fédérale* a été élargie afin de prendre en compte les estimations des recettes et des

Le programme de publication dans le cadre de l'enquête de 1970 sur les dépenses des familles se poursuit et le troisième de quatre volumes a paru en avril sous le titre "Dépenses Principaux centres urbains" (n° 62-537 au

depuis 1972. L'enquête de 1974 sur les finances des consommateurs s'inscrira 30,000 ménages, ce qui constitue la plus importante base d'échantillon

économiques. L'enquête de 1974 sur les finances des consommateurs s'inscrira 30,000 ménages, ce qui constitue la plus importante base d'échantillon de ce genre suivront. Une analyse spéciale sur les antécédents de travail tentera d'établir un lien entre les gains et la durée du travail et d'autres caractéristiques socio-

On a publié un bulletin provisoire portant sur l'E.F.C. de 1973 intitulé "Répartition du revenu au Canada selon la taille du revenu, l'estimation provisoire, 1972", et d'autres publications sur les antécédents de travail tentera d'établir un lien entre les gains et la durée du travail et d'autres caractéristiques socio-

Trois rapports ont paru à partir des données au Canada selon la taille du revenu, 1971" (n° 1-3-553 au catalogue) intitulé "Faibles revenus au Canada, 1969", fondé sur les résultats de l'enquête de 1970 sur les finances des consommateurs. On continuera d'analyser les données sur l'avenir et les dettes et on prévoit publier un recueil d'articles spéciaux.

L'enquête sur les finances des consommateurs est reprise chaque année afin d'obtenir des renseignements sur le revenu et les caractéristiques socio-économiques des familles dans les ménages privés. Des questions spéciales s'y ajoutent périodiquement.

En 1973 a eu lieu l'enquête sur l'équipement des ménages, les données recueillies auprès d'environ 30,000 ménages portent sur différents aspects du logement, de l'équipement et des installations mises à la disposition des ménages. Le bulletin intitulé "L'équipement des ménages" (n° 64-202 au catalogue) a paru en novembre.

La division est chargée de mener trois programmes continus d'enquête sur les ménages et des travaux de recherche dans les domaines connexes.

Division du revenu et des dépenses des consommateurs

Les résultats serviront dans la conception finale et l'exécution de la nouvelle enquête. Le cadre de l'échantillon de l'enquête sur la population active est remanié après chaque recensement décennal afin de tenir compte des changements démographiques; on a presque terminé la révision du cadre commencée en 1971.

La Division de la coordination des enquêtes spéciales

Division de la coordination des enquêtes spéciales

En mai, les membres du personnel ont présenté deux documents à la conférence organisée par le Bureau national de la recherche et les mesures socio-économiques. Le premier portait sur la création d'un ensemble de données systématiques par dossiers de couplage provenant de l'enquête sur les finances des consommateurs et de l'enquête sur les dépenses des familles pour 1970; le second décrivait l'expérience du Canada en ce qui concerne la méthode de rappel et l'emploi du carnet des aliments dans les enquêtes sur les dépenses des consommateurs.

Divers projets de recherche ont été entrepris. Ainsi, on a effectué une nouvelle étude des revenus de 1969 sur les dépenses des familles et une révision a été recommandée. On publiera un bulletin sur les estimations révisées de l'ensemble du revenu monétaire et du revenu de l'emploi dans les comités et les divisions de recensement pour la période 1966-1969.

Le travail sur le terrain a commencé en janvier et se poursuivra tout au long de 1974. On espère que le nouvel échantillon fournira des données qui nous permettront d'analyser les variations observées dans les régimes de dépenses alimentaires depuis 1969, surtout pour les familles à faible revenu.

L'enquête de 1974 sur les dépenses alimentaires des familles, prévue à l'origine sur une petite échelle, a été étendue à 14 villes en plus d'inclure un échantillon supplémentaire spécial de ménages à faible revenu. Un journal des aliments a servi à inscrire les dépenses, la quantité et l'endroit où les articles ont été achetés.

On a terminé en avril le travail sur le terrain budget, fondée sur les dépenses de 1971. Les résultats de l'enquête partielle de rappel sur le logement et en biens ménagers durables, 1971" (n° 62-540 au catalogue) qui fait état des familles dans les villes de Saint-Jean (T.-N.), Halifax, Montréal, Ottawa, Winnipeg, Edmonton et Vancouver. Environ 3,600 questionnaires utilisables ont été recueillis dans ces huit villes. A Whitehorse et à Yellowknife, un échantillon supplémentaire de ménages a fait l'objet d'interviews; c'était la première fois que l'on tentait de recueillir des données sur les dépenses des familles dans ces territoires. On est à analyser le faible taux de réponse en vue des prochaines enquêtes.

La division a publié en janvier le bulletin intitulé "Dépenses des familles urbaines en logement et en biens ménagers durables, 1971" (n° 62-540 au catalogue) qui fait état des résultats de l'enquête partielle de rappel sur le budget, fondée sur les dépenses de 1971.

trictions pertinentes de confidentialité.

On a publié un bulletin provisoire portant sur l'E.F.C. de 1973 intitulé "Répartition du revenu au Canada selon la taille du revenu, l'estimation provisoire, 1972", et d'autres publications sur les antécédents de travail tentera d'établir un lien entre les gains et la durée du travail et d'autres caractéristiques socio-

En 1973-74, la principale tâche de la division à l'extérieur de Statistique Canada a consisté en une révision approfondie de la règle double emploi, visera à: 1) établir si le besoin en renseignements nouveaux peut être satisfait au moyen des données actuelles existantes; 2) s'assurer que la conception et la réalisation des nouvelles enquêtes suivent les normes statistiques appropriées, que le fardeau des enquêtes est allégé et que l'utilité des données est portée à son maximum; et 3) s'assurer que la coordination interministérielle nécessaire a lieu pendant la planification et que les renseignements ainsi obtenus sont disponibles sous réserve des restrictions pertinentes de confidentialité.

Outre ces enquêtes supplémentaires, la division a effectué des enquêtes indépendantes pour le compte du Secrétaire d'État, du ministère des Finances et la Société centrale d'hypothèques et de logement. En ce qui concerne la S.C.H.L., la division s'est occupée d'élaborer une enquête importante sur les logements, la collecte des données est prévue pour la fin de 1974. Pour le Secrétaire d'État, elle a mis sur pied une enquête pilote sur l'emploi du temps. La responsabilité de ce projet a ensuite été confiée à Statistique Canada et les travaux ont commencé tard en 1973-74.

Cette division a regroupé les responsabilités de gestion des enquêtes de ménages qui étaient auparavant réparties dans un certain nombre de divisions. Plus particulièrement, on l'a chargée des enquêtes mensuelles supplémentaires de 12 petites enquêtes sur des sujets tels que le comportement des étudiants pendant la période estivale, l'usage du tabac et les déplacements au lieu de travail et d'autre part, des études d'envergure sur la mobilité de la main-d'œuvre, la garde des enfants, et les caractéristiques des hommes à la pré-retraite. Nombre de ces enquêtes ont été pararrainées à l'extérieur, tandis que les autres faisaient partie du programme d'enquête de Statistique Canada.

du Trésor voulant que les ministères et les organismes déclarent toute nouvelle enquête à Statistique Canada ("Règle des dix réponses dants").

Direction de la statistique des ménages

L.E. Rowebottom, Statisticien en chef adjoint

- Direction de la statistique des ménages
- Direction des institutions et finances publiques

Ce secteur produit des renseignements sur le recensement et des données démographiques, des statistiques sur la santé et le bien-être, la criminalité, l'éducation, les sciences, la culture, les finances des administrations publiques, le revenu et les dépenses des consommateurs et l'emploi et le chômage, en plus de mettre au point de nouvelles statistiques sociales.

Composé de deux directions, ce secteur s'occupe d'un vaste éventail de données socio-économiques courantes sur les particuliers, les familles et les ménages, ainsi que sur les institutions qui les desservent. L'éducation, la santé, l'emploi, le revenu et la criminalité au Canada, sont quelques-uns des domaines sur lesquels les programmes du secteur fournissent des renseignements détaillés. Bien que la majeure partie de ses activités portent sur des programmes de nature permanente, le secteur mène un nombre croissant d'enquêtes spéciales sur les ménages, enquêtes qui sont patronnées par d'autres ministères et organismes fédéraux afin de répondre à leurs besoins en données. La Division de la coordination des enquêtes spéciales revoit les programmes d'enquête des ministères fédéraux et y participe en se chargeant de l'application d'une directive du Conseil du Trésor qui prévoit une telle révision.

Division de l'enquête sur la population active

Cette division publie des bulletins mensuels et annuels sur la population active et les taux d'activité et d'inactivité selon une variété de recoupements. Pendant l'année, on a introduit un certain nombre de nouvelles séries de données.

Au nombre des publications mensuelles, on retrouve

- des données désaisonnalisées par branches d'activité;
 - des données provinciales réelles et désaisonnalisées;
 - des données mensuelles sur les familles des chômeurs;
 - des données sur la durée du chômage, par âge et sexe, et aussi selon l'état matrimonial et le sexe;
 - des données sur l'emploi à plein temps et à temps partiel, par âge et sexe, et aussi selon l'état matrimonial et le sexe.
- Les séries de la publication annuelle ont également été étendues en y ajoutant des données désaisonnalisées de 15 groupes d'acti-

tivité économique et des données réelles et désaisonnalisées pour les provinces de 1966 à 1973. On a aussi inclus des données sur les groupes 15-19 ans et 15-24 ans.

Par ailleurs, on a mis en oeuvre un système de mise à jour automatique du CANSIM, ce qui a permis d'augmenter de 1,000 à 3,000 le nombre de séries fournissant des données principales de l'enquête. Le but premier est de satisfaire aux demandes de données nouvelles et plus détaillées sur le marché du travail, entre autres:

- 1) des demandes de nouveaux genres de renseignements visant à présenter une image plus complète de la complexité de la situation actuelle du marché du travail (identification plus précise des groupes qui peuvent aussi bien être classés comme occupés, chômeurs ou inactifs, méthodes et intensité de la recherche d'un emploi et cumul d'emploi);
- 2) des demandes de données nouvelles sur les aspects dynamiques de la population active (flux entre diverses catégories d'actifs d'un mois à l'autre ou données longitudinales sur semestrielle à l'enquête);
- 3) des demandes d'échantillons plus importants

Parallèlement, le personnel affecté aux projets et à la recherche a entrepris des études spécialisées sur les concepts, le contenu, les techniques d'enquête et le contrôle qualitatif.

On s'est beaucoup attardé à discuter avec les utilisateurs de données pour déterminer leurs besoins. Après plusieurs mois de discussions bilatérales, une conférence de trois jours a eu lieu. Les discussions et la conférence ont permis à la division d'établir les préférences des utilisateurs de données en ce qui a trait au contenu de l'enquête. Cela a grandement contribué à l'élaboration du nouveau questionnaire mensuel.

La nouvelle enquête sera mise en application en 1976. Le premier essai mensuel a commenté en octobre après plus d'un an de préparation intensive. L'essai visait à élaborer et à mettre à l'épreuve de nouvelles techniques de traitement et de collecte des données. Le nouveau système englobe presque tous les aspects de la collecte et du cycle de traitement des données de l'enquête, à partir du choix initial des ménages de l'échantillon jusqu'à la totalisation finale des données d'enquête. Ce système fait appel à des mini-ordinateurs dans chaque bureau régional qui sont reliés à Ottawa.

des recoupements plus détaillés.

La nouvelle enquête sera mise en application en 1976. Le premier essai mensuel a commenté en octobre après plus d'un an de préparation intensive. L'essai visait à élaborer et à mettre à l'épreuve de nouvelles techniques de traitement et de collecte des données. Le nouveau système englobe presque tous les aspects de la collecte et du cycle de traitement des données de l'enquête, à partir du choix initial des ménages de l'échantillon jusqu'à la totalisation finale des données d'enquête. Ce système fait appel à des mini-ordinateurs dans chaque bureau régional qui sont reliés à Ottawa.

des recoupements plus détaillés.

La nouvelle enquête sera mise en application en 1976. Le premier essai mensuel a commenté en octobre après plus d'un an de préparation intensive. L'essai visait à élaborer et à mettre à l'épreuve de nouvelles techniques de traitement et de collecte des données. Le nouveau système englobe presque tous les aspects de la collecte et du cycle de traitement des données de l'enquête, à partir du choix initial des ménages de l'échantillon jusqu'à la totalisation finale des données d'enquête. Ce système fait appel à des mini-ordinateurs dans chaque bureau régional qui sont reliés à Ottawa.

l'emploi et du chômage dans les régions, et à utiliser diverses données administratives à des fins statistiques.

Division de l'analyse structurelle et recherche en productivité

Cette nouvelle division a pris à son compte l'élaboration et la mise en oeuvre de modèles structureaux de l'économie canadienne. Dès le mois de mars 1974 un modèle de détermination de la production (modèles d'entrées-sorties) et le modèle des prix étaient opérationnels. D'autres étaient en cours d'élaboration, tandis que les modèles suivants avaient subi des modifications:

- 1) un modèle d'entrées-sorties à régimes d'offre variables,
- 2) un modèle de prix qui permet aux utilisateurs de modifier les hypothèses sur l'inflation par les coûts et l'évolution du prix des produits,
- 3) un modèle de commerce équilibré qui soumet le calcul des niveaux d'activité et des importations à des contraintes d'équilibre commercial,
- 4) un modèle d'entrées-sorties interrégional,
- 5) une version à programmation linéaire du modèle d'entrées-sorties de 1966.

Quelques projets analytiques sont actuellement entrepris afin de connaître davantage les propriétés des bases de données et des modèles. Ces programmes comprennent notamment une étude comparative des tableaux et des modèles d'entrées-sorties de 1961 et de 1966, une étude des conséquences de l'agrégation dans les modèles d'entrées-sorties, une étude comparative de l'impact des dépenses d'investissement sur l'économie canadienne, et enfin, une étude des chaînes de montage.

(structures)

- Division des normes
- Division des entrées-sorties
- R&D en statistiques urb
- Régionales
- Recherche en productivité

afin de déceler les différences avec le manuel de recensement de 1971. On espère ainsi donner plus de poids à la Classification canadienne descriptive des professions.

Classifications des produits

Les travaux se sont poursuivis sur les volumes II et III de la Classification type des produits révisée. La Classification par principaux groupes de produits a été transférée de la Division des entrées-sorties, et le processus de rapprochement de cette classification avec la Classification type des produits déterminera la forme des volumes II et III.

Classification géographique type

Les préparatifs reliés à la publication de la première édition de la Classification géographique type se poursuivent, sa sortie est maintenant prévue pour l'automne de 1974.

Classification des services

Un deuxième projet de cette classification a été diffusé pour recueillir des commentaires à partir desquels ont prévu rédiger une version finale.

Division des entrées-sorties

La Division des entrées-sorties a pour tâche

La sous-section s'occupe de la classification et des statistiques à fournir des services consultatifs et de soutien aux personnes s'occupant des données sur les professions provenant du recensement de 1971, du codage des professions lié à l'enquête postcensale sur la main-d'œuvre nationale qualifiée et à l'enquête sur la profession des salariés. Les discussions ont commencé avec le ministère de la Main-d'œuvre et de l'Immigration sur les révisions à apporter à la Classification canadienne descriptive des professions.

Classification des professions

cières du gouvernement fédéral.
Les travaux sur la classification type des professions, des produits, des industries et des services, ainsi que sur une classification géographique type, se sont poursuivis.

Division des normes

La Division des normes s'occupe du contrôle des classifications et des concepts pour l'en-semble du Bureau et elle compte environ 25 employés, qui sont surtout des spécialistes et des techniciens. La division a pris part à un effort collectif pour améliorer la documenta-tion des données; elle a de fait effectué des travaux préliminaires sur l'impact de la conver-sion au système métrique, et elle a participé aux travaux d'un comité interministériel sur le codage et la classification des opérations finan-

Division des normes

Cette division s'occupe de projets de recherche et de développement reliés à l'élaboration de méthodologies pour l'estimation de divers agrégats économiques, de la construction et l'actualisation de modèles afin d'améliorer l'actualité ainsi que la qualité de diverses séries de la recherche analytique Statistique Canada, de la recherche analytique orientée vers les projets ainsi que de la dés-saisonnalisation et autres techniques de lissage pour l'analyse des séries chronologiques. Cette division fournit aussi des services consultatifs à tout le Bureau dans le domaine de l'application

Division des analyses de conjoncture

Cette division s'occupe également lançée, canadienne a été également lançée, prises de contrôle étrangères dans l'économie construction d'une série statistiques sur les au Canada. Une étude de rentabilité sur la centre sur les entreprises sous contrôle étranger demandes des utilisateurs, le travail s'est con- aux entreprises multinationales. En raison des décisions dans le domaine des politiques reliées à l'analyse empirique et aux prises de étude des besoins en données intégrées des formée au milieu de l'année, a entrepris une La Section des entreprises multinationales, et d'autres moyens de collecte des données.

afin de tester les méthodes d'enquête existantes aux postes frontalières importants de l'Ontario nationaux à l'aéroport Malton de Toronto et préparés pour une enquête des voyageurs inter- secteurs de l'économie. Des plans ont été aux comptes de flux financiers pour les quatre thodes du rassemblement des données relatives publié les descriptions des sources et des méth- Dans le cadre d'un programme permanent, on a publiée par l'entremise du système CANSIM. flux financiers pour la période 1962-1969 a été Une série historique révisée des comptes de activités des entreprises multinationales.

nécessaire pour l'examen de la structure et des enfin, est relié à l'amélioration de la base qui est et leurs caractéristiques. Le troisième ensemble, pays, ce qui comprend le nombre de voyageurs nationaux entre le Canada et tous les autres rapporte aux estimations des voyages inter- teurs et emprunteurs. Le deuxième ensemble se les flux de capitaux entre divers secteurs pré- et est fondé sur un système destiné à intégrer mier se rapporte aux flux financiers au Canada ensembles de statistiques économiques. Le pré- Cette division rassemble, analyse et diffuse trois

Division des flux financiers et des entreprises multinationales

Un document sur le bilan des investisse- ments internationaux du Canada a été achevé en partie, et certaines sections ont paru dans le *Quotidien de Statistique Canada*. Par ailleurs, des projections des ratios de participation pour d'importants segments de l'industrie cana- dienne, établis à partir des changements de contrôle connus dans les grandes sociétés, ont été publiés pour 1971, 1972 et 1973. La division a également pris son concours au Fonds monétaire international pour la révi- sion de son manuel de la balance des paiements.

La Sous-section des méthodes de désaison- nalisation du Service des séries chronologiques générales a étudié les séries désaisonnalisées de la population active et a fourni aussi des services consultatifs.

La Sous-section des méthodes de désaison- données CANSIM. de publications régulières utilisant la base de rales a permis l'automatisation de la production par la Section des séries chronologiques gène- système interface Alphatext CANSIM (SIAC) Au cours de l'année, la mise au point d'un chronologiques qui y sont stockées.

extraire et analyser les données des séries connaissance minimale des ordinateurs peuvent mise en service, les personnes qui n'ont qu'une d'information socio-économique). Depuis sa tion Management System — Système canadien CANSIM (Canadian Socio-economic Informa- loppement et de l'administration du système Cette section s'occupe également du déve- ture.

rapide et interactif aux dernières données statis- tiques sorties, en plus de l'analyse de conjonc- Le Section des renseignements économiques met actuellement sur pied un Service de rensei- gnements économiques afin de fournir un accès produit national brut.

recherche permanent au sein de la Division du produit national brut. Au cours de l'année, la Section de l'écono- métrie a fait surtout porter ses travaux de recherche sur la construction d'un modèle économétrique de l'économie canadienne. Un prototype de ce modèle est devenu opéra- tionnel en février, et constitue un fonds de recherche permanent au sein de la Division du

des techniques économétriques et connexes.

Système des comptes nationaux (courants)

- Division du produit national brut
- Division du produit industriel
- Division de la balance des paiements
- Division des flux financiers et des EMN
- Division des analyses de conjoncture

Division du produit national brut

Les responsabilités de cette division sont la préparation et la diffusion des agrégats des comptes nationaux des revenus et des dépenses trimestriels, annuels et chronologiques, ce qui comprend le revenu national, le produit national brut et la dépense nationale brute, et qui sont exprimés en dollars courants et en dollars constants, pour les quatre principaux secteurs de l'économie. Les activités de la division comprennent aussi des programmes permanents d'élaboration et d'analyse.

En vertu d'une entente fédérale-provinciale signée en mai, la division a lancé un programme de recherches destiné à estimer la répartition provinciale de l'ensemble du produit intérieur brut canadien. Les problèmes de concepts, de méthodologie et de sources de données sont actuellement examinés de concert avec les organismes statistiques provinciaux et les représentants d'autres ministères fédéraux. L'estimation de la répartition des principaux agrégats est maintenant très avancée, et les premiers résultats pourraient sortir vers le milieu de 1975.

Une version à jour du document de référence sur les comptes nationaux des revenus et des dépenses a été terminée, et sa traduction a commencé. Cette nouvelle version incorpore tous les changements de concept, de méthodologie et de source qui ont été introduits dans les

comptes nationaux depuis 1956. Le document devrait sortir au cours de la deuxième moitié de 1975.

Division du produit industriel

Cette division publie des indices mensuels, trimestriels et annuels du produit intérieur réel pour l'économie prise dans son ensemble et pour un certain nombre d'activités économiques. Chaque mois, plus de 120 séries sur la production sont ainsi publiées, dont des agrégats pour l'ensemble du secteur de la fabrication, du commerce de détail et des transports. En juillet 1973, un supplément annuel à la publication mensuelle *Indices du produit intérieur réel par industrie* a été publié. Il contenait des révisions annuelles à compter de 1961, et réélavançait les mesures du produit intérieur réel d'avantage des séries en prix constants du produit national brut. Les indices trimestriels et mensuels ont été également révisés à compter de 1968.

La division a également publié des chiffres annuels sur la valeur ajoutée, exprimée en dollars courants, des industries de biens par province et territoire. Ces données, qui portent sur la période 1926-1971, ont paru dans la publication *Relevé de la production 1971*, sortie en décembre 1973.

Le personnel de la division a pris part à

l'élaboration de mesures de la production réelle et de la productivité dans le cas des industries non commerciales, et il a présenté des documents sur ce sujet à diverses conférences.

Division de la balance des paiements

Cette division s'occupe de la préparation, de l'analyse et de la diffusion de données portant sur :

a) les estimations de la balance des paiements portant sur les opérations courantes et de capital entre le Canada et les autres pays, et

b) le bilan des investissements internationaux du Canada, ses avoirs et ses engagements à l'étranger.

Parmi les événements particuliers de l'année, on peut citer la publication des résultats d'une enquête sur les accords internationaux sur les brevets, le rapprochement des statistiques du compte courant de la balance des paiements Canada-Etats-Unis pour 1971 et 1972, qui a été publiée en mars 1974, et enfin l'introduction, dans la publication annuelle *La balance canadienne des paiements internationaux*, de nouvelles sections relatives aux définitions et à la matière des comptes, ainsi que d'une chronologie des événements liés à la balance des paiements.

- P. G. Kirkham, Statisticien en chef adjoint**
- **Coordonnateur, Statistique financière**
 - **Conseiller supérieur en intégration**
 - **Système des comptes nationaux (courants)**
 - **Système des comptes nationaux (structurels)**
- Ce secteur se compose de la Direction des comptes nationaux (courants), de la Direction des comptes nationaux (structurels), du conseiller supérieur en intégration et du coordonnateur de la statistique financière. La Direction des comptes nationaux (courants) s'occupe de la production, de l'analyse et de la diffusion du système des comptes nationaux, à l'exception des tableaux d'entrées-sorties, ainsi que de l'analyse de conjoncture. La Direction des comptes nationaux (structurels) travaille sur les estimations répétées; elle s'occupe aussi de l'élaboration et de l'exploitation de modèle économiques structurels, y compris les tableaux d'entrées-sorties, ainsi que de la mise au point de systèmes standard de classification qui sont nécessaires à l'intégration des activités qui touchent l'ensemble du Bureau. Le secteur est l'utilisateur interne final de la production statistique économique du Bureau, et à lui incombe la responsabilité de l'élaboration de systèmes standard de classification ainsi que de la recherche structurelle.

Coordonnateur de la statistique financière

En collaboration avec les fonctionnaires provinciaux, les renseignements existants sur les hypothèses sont approfondis grâce à la mise en tableaux des dossiers des enregistrements d'hypothèques. Des discussions ont eu lieu avec toutes les provinces et plusieurs d'entre elles produisent maintenant des données.

Le coordonnateur de la statistique financière a préparé un rapport à l'intention du secrétaire du Comité interministériel qui s'occupe des ordinateurs et des communications, rapport qui aborde les besoins statistiques des utilisateurs des communications informatiques ainsi que les problèmes qui s'y rapportent.

Conseiller supérieur en intégration

Le travail appréciable qu'a représenté la préparation d'un recueil de statistiques sociales a été terminé sous la surveillance du conseiller supérieur en intégration. Le personnel a terminé un projet pilote sur les indicateurs urbains de l'environnement qui se rapportent aux transports et à l'accessibilité des loisirs dans la région d'Ottawa. Une première étude quant à la possibilité de produire une mesure nette du bien-être a été faite, et un document examinant

bauche par profession, activité économique, province et région métropolitaine de recensement, on a calculé les moyennes annuelles des taux minimums d'embauche liés aux postes vacants.

Cette année, Statistique Canada a pris à sa charge la production d'un indice de l'offre d'emplois fondé sur les annonces classées qui paraissent dans les journaux. Cet indice, qui relevait auparavant du ministère des Finances, fournit des données par région dans une série homogène qui remonte jusqu'à 1962.

La Division du travail a organisé une conférence des représentants provinciaux des Commissions des accidents du travail afin de discuter de l'élaboration d'un programme national de statistiques sur les accidents du travail. Un comité directeur, composé de représentants des commissions des accidents du travail de chaque province et des organismes de sécurité, a été créé dans le but d'aider Statistique Canada à mettre au point ce programme. La première réunion de ce comité directeur doit se tenir à l'automne 1974.

La banque de données sur les pensions créée en collaboration avec les autorités provinciales du Québec, de l'Ontario, de la Saskatchewan, de l'Alberta et du Département fédéral des assurances, a fourni une multitude de renseignements aux organismes clients ainsi qu'aux particuliers qui en faisaient la demande. Afin de compléter les renseignements disponibles des quatre organismes provinciaux, on a effectué dans les autres provinces en 1973 une enquête sur les entreprises qui participaient à des régimes de pensions. Les résultats paraîtront dans la publication intitulée *Régimes de pensions au Canada* (n° 74-401 au cat.).

En 1973, la division a fait paraître une publication trimestrielle intitulée *Enquête trimestrielle sur les régimes de pensions en fiducie* (n° 74-001 au cat.), afin de fournir des renseignements sur l'importance et les régimes de placements des fonds de pensions. Les régimes de pensions accumulent des fonds à l'heure actuelle à raison de plus d'un milliard de dollars par année et constituent une importante source de capitaux de placement.

Cette année, la Section de la recherche et du développement en statistiques de main-d'œuvre a surtout concentré ses activités à l'examen de documents administratifs devant servir à des fins statistiques. La section a notamment effectué une étude des données sur la rémunération provenant des dossiers fiscaux et une analyse des caractéristiques des chômeurs en se fondant sur les dossiers de l'assurance-chômage. Au nombre des projets de recherche en cours, on peut citer ceux consacrés aux tendances de la recherche d'emploi chez les travailleurs canadiens, à l'expérience de l'emploi chez les jeunes travailleurs et enfin, aux travailleurs masculins âgés dans la population active au Canada.

La division prévoit mettre au point un programme de statistiques à long terme sur l'emploi, les gains et la durée du travail. L'un

des objectifs de ce projet est de permettre à la division de mieux répondre aux demandes des utilisateurs, par exemple en ce qui concerne les données pour les petites entreprises. Un des autres objectifs est d'améliorer l'adaptation aux méthodes de rémunération changeantes.

Le schéma de pondération de l'indice général des prix de gros fait l'objet d'une révision et on améliore les parties consacrées aux articles et aux enquêtes. La révision de l'indice des prix

de magasin. Pour ce qui est des prix industriels, on a continué de publier les indices des prix de vente des fabricants pour 101 industries et 453 produits. On peut se procurer sur demande les

medecins.
On examine actuellement la possibilité de produire des indices de prix de détail par genre

Dans le groupe des industries de service, la mise au point d'indices des prix des taux de transport progresse, en particulier pour le transport par autobus (y compris les autobus scolaires). On a effectué une enquête afin d'obtenir des poids pour la construction d'un indice des prix légaux; en outre, on travaille à produire un indice des prix des biens et services achetés par les hôpitaux de l'Ontario. De concert avec le ministère de la Santé nationale et du Bien-être social, la division prépare un indice des prix portant sur les honoraires des

La mise au point du système des indices des prix de vente des entrepreneurs se poursuit. Des enquêtes sont effectuées dans les domaines de la plomberie, des installations électriques, de la maçonnerie, du câblage acoustique, des couvertures de sol, du plâtrage et de la construction

produits chimiques et de minéraux paraffinés, la construction d'usines de raffinage de pétrole, la construction de 14 villes. Un nouvel indice de développement a été établi à 12 mètres et de base des syndicats et visent certains suppléments salariaux. Ils s'ajoutent à la base de la déflation. Ces indices sont les bases de la déflation. Les indices publics et les indices privés sont les bases de la déflation. Les indices publics et les indices privés sont les bases de la déflation.

On a publié un certain nombre de nouveaux

La Section des prix internationaux a mené 36 enquêtes élaborées et 13 enquêtes abrégées sur les prix de détail et le coût de la vie dans le régime d'allocation versés aux personnes âgées du service existant du gouvernement canadien. Les agents de la section ont visité 15

Le système d'allocation d'isolement des fonctionnaires fédéraux institué par le gouvernement canadien en produisant des indices pour 79 endroits isolés. Ces indices proviennent d'enquêtes effectuées dans l'est de l'Arctique, dans le nord du Québec, au Labrador, dans l'est du Québec et dans le district de Mackenzie (Terri-

La première d'une série d'études de mise à jour sur la comparaison des prix à la consommation d'articles spécifiques d'un endroit à l'autre a été publiée. Quatre articles ont été traités: le tabac et l'alcool, en mai 1973; la santé et les soins personnels, en août 1973; les transports, en octobre 1973; et les loisirs, l'éducation et la lecture, en décembre 1973.

Division des finances des entreprises

des naturelles au Canada. On a commencé la préparation de l'édition de 1971 de *Statistique financière des sociétés* vers la fin de l'année financière. Cette publication contient davantage de données financières détaillées et donne pour la première fois des renseignements sur les sociétés d'état. Un échantillon annuel révisé a été choisi et sera utilisé pour estimer la production de publications annuelles pour 1972. La Section des corporations industrielles publie tous les trimestres de revues intitulées "Sociétés industrielles, statistique financière" et qui présente les estimations de l'actif et du passif, la part des actionnaires, les bénéfices non

sociétés », a paru pendant l'année. Elle comportait certaines améliorations sur les publications précédentes. On a changé les tableaux de rapprochement des bénéfices comptables et des revenus imposables pour présenter de façon plus logique les postes qui servent à déterminer l'imputé sur le revenu des corporations. On est allé jusqu'à analyser le lien qui existe entre les impôts sur le revenu et le revenu osodossable, entre les impôts sur le revenu et la batiécification comptable pour chaque industrie. On a également analysé en détail l'importance du revenu net d'impôts et des dépenses fiscales au sein de l'industrie et des ressources.

catlon "Liens de parenté entre firmes" qui contient des données de 1972, et qui paraîtra à la fin de 1974. La mise sur pied d'un système automatisé pour mettre en tableaux les données de 1973 et des années suivantes sous forme d'édition 1971 de "Statistiques fiscales des entreprises" va bon train.

— Corporations; et Partie II — Syndicats ou-
vriers) ont été déposées devant le Parlement.

En outre, on a fait des progrès dans la
préparation d'une nouvelle série. En effet, le
rapport des corporations de 1972 comprendra
un bilan, les revenus et les bénéfices non
répartis de même que la source et l'emploi de
fonds.

Les travaux se sont poursuivis sur la publi-

division pour caractériser l'intégration des séries financières trimestrielles et annuelles et pour améliorer la qualité et les délais. Cette nouvelle organisation permettra une intégration plus ordonnée des séries de statistiques financières et l'utilisation de procédures plus efficaces de collecte et de suivi, surtout en ce qui a trait aux données CALURA.

(CALURA). En 1973-74, on a profilé la structure de la

statistiques financières et fiscales sur les sociétés et applique la Loi sur les déclarations des corporations et des syndicats ouvriers

La Division des finances des entreprises
La Division collecte, analyse et publie des

des produits agricoles canadiens et de celui des

Division du travail

Un nouvel univers sur les sociétés fondé sur national brut et les flux financiers.

Ces séries sont utiles aux analystes de activités financières et à la qualité des données.

On a utilisé cette année de nouveaux questionnaires sur les industries en particulier et plus en détail les crédits, par province.

On a pu constater que les données semblables à celles qui se rapportent aux sociétés industrielles sur la participation des institutions financières et des intermédiaires financiers installés au Canada, d'autres publications portent sur les faillites commerciales, par industrie et par province, les encasements, par villes principales et par genre de compte, et les caisses d'épargne et de

«partis, les recettes et les dépenses, et les bénéfices des sociétés des 25 principales catégories de l'industrie non financière. On peut obtenir ces séries de CANSIM.

d'analyse générale du marché du travail.

Statistique générale

- Division du commerce extérieur
- Division des prix
- Division des finances des entreprises
- Division du travail

Division du commerce extérieur

La division a pour objectif principal de publier des statistiques sur les importations et exportations de marchandises classées par pays d'origine ou de destination et par genre de produit. Ces statistiques se fondent sur les déclarations que les bureaux de douanes du Canada reçoivent au ministère du Revenu national (Douanes et accises). Les bulletins de la division indiquent, en complément, la province canadienne de dédouanement et, dans le cas des exportations, le mode de transport et le port canadien de chargement.

En 1974, plusieurs de ses grandes réalisations ont été le fruit de relations avec les organismes statistiques des autres pays ou des associations internationales. On a élargi le cadre du programme conjoint Canada-États-Unis en vue d'établir un rapprochement des statistiques du commerce bilatéral des deux pays visant à publier certaines estimations trimestrielles. Les travaux portant sur la statistique Canada-États-Unis pour 1973 ont finalement abouti à un rapprochement final des données vers la fin de l'année. La commission statistique des Nations Unies, informée par le bureau statistique de l'ONU de la portée des études conjointes canado-américaines, a été invitée à parrainer une étude sur les divergences des statistiques du commerce en s'inspirant de la

méthodologie nord-américaine.

La Section des mesures commerciales a rédigé, dans le cadre de ses travaux méthodologiques sur les prix à l'exportation et à l'importation, une analyse qu'elle a présentée à la Conférence des statisticiens européens de la Commission économique des Nations Unies pour l'Europe.

La Division a également appuyé, par la participation de ses spécialistes de produits, les travaux du Conseil de coopération douanière à Bruxelles visant à établir un code homogène des produits à l'échelle internationale qui servirait aux statistiques du commerce et des transports. La division a continué de fournir son appui au ministère du Revenu national dans la mise en oeuvre du programme automatisé sur le dédouanement des importations. Une partie du travail a consisté à créer neuf sous-sections régionales dans les principaux bureaux douaniers pour surveiller la qualité du codage des produits par les courtiers et les importateurs. On a également fourni une aide technique afin d'établir la relation entre le Tarif des douanes du Canada et la Nomenclature de Bruxelles.

Division des prix

La division des prix collecte, dépouille et publie des données sur les prix à tous les niveaux de l'activité économique. Son champ d'étude vise

trois domaines: les prix de détail et le coût de la vie, les prix industriels et la recherche et le développement. Le premier groupe comprend la mesure du mouvement des prix de détail et des écarts de prix en ce qu'ils se rapportent aux modifications et variations de prix à la consommation au Canada et entre le Canada et d'autres pays. Le secteur des prix industriels s'occupe de la production et de la distribution des produits et des services. Le groupe chargé de la recherche et du développement coordonne la recherche et l'analyse dans le domaine des prix industriels et des prix de détail.

Le programme de mise à jour de l'indice des prix à la consommation a été achevé par l'introduction de nouveaux poids afin de tenir compte des habitudes de dépenses des familles de 1967. La publication de l'indice repondéré a commencé en mai 1973.

On a étendu le programme de collecte des prix de détail dans les villes des Maritimes, y compris Charlottetown et Summerside, et l'on a terminé l'étude sur la possibilité de produire un indice des prix à la consommation pour un centre démographique plus petit. Une autre étude visait la publication des prix de détail d'environ 50 articles alimentaires de supermarchés dans 14 villes du Canada. Les résultats ont été publiés.

regants. Ces mesures, fondées sur différentes techniques d'évaluation de l'amortissement et des stocks bruts, existent déjà pour certaines industries.

En vue d'analyser de façon critique le comportement de notre série sur les stocks de capital, nous avons établi un indicateur économique d'utilisation maximale dans le secteur de la fabrication. Nous espérons pouvoir publier cette série sous peu.

Afin de répondre à la demande croissante en statistiques régionales, nous avons commencé à travailler dans ce domaine et prévoyons faire paraître bientôt les premières données.

On a étendu le recensement de l'industrie de la construction aux entrepreneurs généraux en construction non résidentielle, aux entrepreneurs généraux en construction résidentielle et aux entrepreneurs spécialisés.

Pendant l'année, on a commencé avec 58,000 entrepreneurs en construction afin de connaître le genre et la forme juridique de leur entreprise. En plus d'avoir identifié 65,000 entrepreneurs en construction actifs, la division a automatisé un système d'envoi postal et de tenue des fichiers pour l'exploitation efficace des renseignements.

compte des changements actuels qui se produisent sur le plan de la période d'exécution et de la nature des travaux, de la valeur et des modifications aux ouvrages, fournit à tous les mois des mesures détaillées de la construction domiciliaire au niveau provincial. La nature des travaux sert à évaluer la construction domiciliaire et la période choisie à cette fin par rapport aux disponibilités en main-d'œuvre et en matériaux. Il sera possible par la suite d'évaluer la nature des travaux selon la région géographique, le mois de mise en chantier, l'importance de l'ouvrage et la période du cycle économique.

Les données sur la nature des travaux servant à l'évaluation des logements nous aideront à achever la mise au point d'un système d'évaluation de la construction non résidentielle.

La division continue à produire des estimations sur les dépenses d'investissement et de réparation au titre de la construction, des machines et du matériel pour toutes les industries et l'ensemble des provinces. Des estimations séparées pour le Yukon et les Territoires du Nord-Ouest ont paru pour la première fois en avril 1973. Ces mesures sont publiées à tous les trimestres, dès que les projets et les dépenses se concrétisent. Des bulletins semi-annuels sont publiés.

La division a également entrepris de produire des estimations sur la propriété publique et privée par province qui seront publiées en 1974-75. Dans le cadre de la révision continue de l'univers et de l'échantillon, on a commencé une nouvelle étude de l'industrie du transport motorisé en collaboration avec la Division des transports et des communications.

On a entamé des négociations avec les bureaux statistiques des provinces en vue d'effectuer des enquêtes conjointes sur les dépenses d'investissement et de réparation. La visite de toutes les capitales provinciales nous a permis d'étudier les besoins des provinces et on envisage de mener de telles enquêtes avec le Québec, la Colombie-Britannique, la Nouvelle-Ecosse et la Saskatchewan. On s'attend à ce que d'autres provinces emboîtent le pas.

Les estimations annuelles des flux et stocks de capital et les estimations connexes du capital fixe au titre de la construction non résidentielle au Canada ont été mises à jour et stockées dans CANSIM. Ces données sont maintenant disponibles pour la période de 1926 à 1973. On a approuvé une nouvelle publication annuelle intitulée "Flux et stocks de capital fixe" (in 13-21 au catalogue) et on a multiplié les efforts en vue d'automatiser les étapes de sa publication. La première parution, prévue pour mai 1974, constituera un précédent sur les systèmes CAIS (SYSTÈME D'INTERFACE ALPHATEXT-CANSIM). En effet, la technique de publication sera complètement automatisée: données sur bande — transfert dans CANSIM — dans CAIS — et — publication.

Une étude pilote sur la possibilité d'évaluer d'autres mesures a donné des résultats encourageants.

(garfies marchandes du centre ville) et des données consolidées sur les régions métropolitaines et les principales agglomérations urbaines en vue de compléter les données provinciales.

La Section du commerce de détail a effectué une nouvelle enquête en s'inspirant de la formule du recensement sur les grossistes pour 1973 et les résultats seront publiés en 1975. On effectuera ensuite ces enquêtes à tour de rôle et les résultats serviront à corriger les données mensuelles provenant des enquêtes-échantillon régulières.

Les résultats de la première enquête annuelle sur les ventes de moteur diesel et à gaz ont paru en 1972.

La Section des services a publié son premier bulletin sur l'industrie de l'informatique et il a fait bonne figure dans le secteur commercial et la presse.

Au cours de 1973-74, on a procédé à la planification d'un programme d'enquête en trois étapes sur le taux d'occupation des hôtels. Une étude pilote a été effectuée.

On a ajouté à la publication mensuelle "Crédit à la consommation" les prêts personnels consentis par les sociétés de fiduciaire et de prêts hypothécaires.

On a mis en oeuvre une nouvelle enquête statistique annuelle sur les ventes et les importations de distributeurs automatiques.

Parmi ses réalisations importantes, la division a recueilli pour la première fois des statistiques sur les associations non commerciales telles que les oeuvres de charité, les sociétés de secours mutuel et les associations professionnelles.

Toutes les données sur les oeuvres de charité (définies par Revenu Canada) proviennent des dossiers administratifs afin d'éviter la double comptabilisation.

La Division de la construction élabore des mesures détaillées de la construction, de l'investissement et des activités connexes.

Au cours des dernières années, on a amélioré les méthodes servant à évaluer les nouvelles constructions résidentielles au moyen de données sur les mises en chantier et les achèvements de quatre types de logements: maisons individuelles, maisons doubles, maisons en rangée et appartements. On a élaboré des tableaux sur les périodes d'exécution et la nature des travaux pour chaque type de logement par région et par mois de mise en chantier.

Cette année, un système informatique a été mis sur pied en vue d'effectuer les longs calculs nécessaires à l'estimation de la valeur de la construction résidentielle. Ce système, qui tient compte des changements actuels qui se produisent sur le plan de la période d'exécution et de la nature des travaux, de la valeur et des modifications aux ouvrages, fournit à tous les mois des mesures détaillées de la construction domiciliaire au niveau provincial. La nature des travaux sert à évaluer la construction domiciliaire et la période choisie à cette fin par rapport aux disponibilités en main-d'œuvre et en matériaux. Il sera possible par la suite d'évaluer la nature des travaux selon la région géographique, le mois de mise en chantier, l'importance de l'ouvrage et la période du cycle économique.

Division de la construction

transports routiers et d'autres statistiques plus complet de ces transporteurs et une nouvelle base pour les enquêtes et les publications. En collaboration avec Transports Canada et d'autres organes, la division a mis sur pied dans ce ministère une banque de données homogènes et complètes sur les accidents à l'échelle nationale sous le nom de TRACAD (Système de données sur les accidents de la circulation).

Un comité interministériel, dirigé par la division, a élaboré une méthode intégrée d'analyse de la statistique du transport et un sous-comité a recommandé que soit redéfini l'univers de l'enquête sur le transport maritime au Canada.

Le Centre des statistiques de l'aviation a collaboré avec Transports Canada à la mise au point d'un système automatisé d'échange de données pour faire rapport, au moyen des réserves de télécommunications, sur les mouvements des aéronefs aux aéroports de Transports Canada munis de tours de contrôle. Tout le programme de la collecte des données à leur publication, est automatisé.

Par l'entremise de cette division, Statistique Canada collabore avec d'autres organismes fédéraux aux négociations qui servent de point de départ aux accords internationaux en matière de transport commercial aérien.

Pour répondre à la demande croissante, on a introduit en janvier une enquête mensuelle, complètement automatisée, sur la vente de temps d'antenne radiophonique.

Division du commerce et des services

Cette division collecte, déduplique et publie des données sur la distribution des biens et la prestation de services dans les secteurs du commerce de détail et de gros et des services de l'économie; et sur les domaines du financement des ventes, du crédit à la consommation, de la vente directe, des distributeurs automatiques et des associations non commerciales.

En 1973-74, on a raccourci le délai de production des publications annuelles et les résultats de la plupart des enquêtes paraissent maintenant dans les 12 mois qui suivent l'année de déclaration.

On a continué le traitement des données recueillies en 1972-73 portant sur le recensement du commerce et des services pour 1971. On a également commencé à planifier les prochains recensements qui se fonderont sur le fichier principal de la division (en constitution) pour un dénombrement sur le terrain.

La nouvelle enquête mensuelle sur le commerce au détail sera mise en oeuvre en 1975. Elle comprendra une ventilation plus détaillée des genres d'entreprise et, outre les données provinciales, on publiera des données sur les régions métropolitaines de Montréal, Toronto, Winnipeg et Vancouver.

On a élargi le cadre de l'enquête annuelle sur les centres commerciaux qui comprend maintenant les centres commerciaux auxiliaires

- Division de l'agriculture
- Division des industries manufacturières et primaires
- Division des transports et des communications
- Division du commerce et des services
- Division de la construction

Division de l'agriculture

La Division de l'agriculture a la responsabilité d'un système statistique visant à collecter, évaluer et publier régulièrement des données sur l'industrie agricole. Le programme est dirigé en collaboration avec les ministères provinciaux aux termes d'autres dispositions. La collaboration avec les ministères provinciaux qui participent à quelques-unes des enquêtes, et aux termes d'autres dispositions. La collaboration avec les ministères provinciaux se maintient, surtout avec Agriculture Canada. On a effectué en 1972 une nouvelle enquête descriptive par sondage d'environ 6,000 agriculteurs afin d'obtenir des données de base sur les surfaces cultivées, le nombre de bœufs, les stocks de céréales sur la ferme, le nombre de fermes et le revenu provenant de la ferme et hors ferme. Pour 1973 et 1974, on a porté à 8,000 le nombre de fermes enquêtées, et ce nombre sera porté à 9,000 en 1975. L'enquête vise à fournir des repères annuels en remplacement des données quinquennales pour les estimations statistiques découlant des données recueillies dans les enquêtes postales. Cette enquête en est encore au stade de l'élaboration, mais elle devrait être prête pour 1976.

La Section des cultures s'occupe des cultures horticoles et des grandes cultures et d'enquêtes postales des répondants agricoles; elle publie ensuite des données sur les surfaces

cultivables, les conditions de croissance, les rendements, la production des récoltes, les stocks de céréales et les prix payés par les agriculteurs. Outre ces enquêtes, il faut citer celles sur les industries de minoterie et de broyage des graines oléagineuses.

On intègre les données obtenues de ces enquêtes agricoles aux statistiques qui émanent des activités de la Commission canadienne du blé, de la Commission canadienne des grains, des groupes commerciaux et de plusieurs ministères pour préparer des études suivies sur l'offre, les mouvements et le commerce canadien des céréales alimentaires, des céréales fourragères et des graines oléagineuses. On maintient un programme de déclaration agricole sur le commerce mondial des cultures céréalières et oléagineuses en collaboration avec le Service des délégués commerciaux du Canada. On a évalué la rentabilité et la praticabilité des recommandations faites au cours des réunions spéciales tenues sur les statistiques horticoles et les résultats ont été communiqués au Conseil horticole canadien.

Des enquêtes ont été effectuées dans la région de Niagara (Ontario) pour mesurer objectivement la production fruitière. C'est à partir du terminal de St-Catherine que les données informatives ont été entrées dans le système de traitement

En 1972, on a entrepris conjointement avec nationale le nombre approximatif de bœufs, pourront être utilisés pour calculer à l'échelle On espère que des résultats complémentaires tats de l'enquête descriptive sur l'agriculture. La section a participé à l'analyse des résultats à fournir.

La section a participé à l'analyse des résultats à fournir. On a commencé les travaux d'élaboration d'un nouveau système d'échantillonnage pour les enquêtes de mesure objective en utilisant un échantillon aérolaire des blocs au lieu d'une liste. Le dénombrement initial a été effectué en octobre et des équipes d'agents recenseurs seront envoyées à Niagara en juin et juillet pour terminer le travail. Une partie des fonds provenait de l'industrie fruitière.

Pendant l'année, l'élaboration de données détaillées sur le secteur céréalières fourragères-bétail a été l'activité prédominante de la Sous-section des statistiques de commercialisation.

La Section du bétail et des produits d'origine animale fournit des renseignements statistiques sur l'élevage au Canada en publiant des données relatives à la production et aux ventes de lait et de produits laitiers de transformation, de bovins et de veaux, de porcs, d'ovins (y compris la laine), de volaille, d'œufs et d'animaux à fourrure.

La section a participé à l'analyse des résultats à fournir. On a commencé les travaux d'élaboration d'un nouveau système d'échantillonnage pour les enquêtes de mesure objective en utilisant un échantillon aérolaire des blocs au lieu d'une liste. Le dénombrement initial a été effectué en octobre et des équipes d'agents recenseurs seront envoyées à Niagara en juin et juillet pour terminer le travail. Une partie des fonds provenait de l'industrie fruitière.

Pendant l'année, l'élaboration de données détaillées sur le secteur céréalières fourragères-bétail a été l'activité prédominante de la Sous-section des statistiques de commercialisation.

La Section du bétail et des produits d'origine animale fournit des renseignements statistiques sur l'élevage au Canada en publiant des données relatives à la production et aux ventes de lait et de produits laitiers de transformation, de bovins et de veaux, de porcs, d'ovins (y compris la laine), de volaille, d'œufs et d'animaux à fourrure.

La section a participé à l'analyse des résultats à fournir.

La Division des profils et des registres d'entreprises se compose de trois subdivisions: accès aux documents fiscaux, profils et registres d'entreprises.

La Subdivision des registres d'entreprises a mis sur pied il y a quelques années un registre d'entreprises mais ce n'est qu'en juin 1973, à la suite d'une directive du Statisticien en chef, qu'il a véritablement pris une place officielle dans les opérations de recensement de Statistique Canada. On l'a étendu de façon à prendre en compte toutes les sociétés canadiennes. Parallèlement, on élaborait un projet d'utilisation des fichiers principaux des divisions dans le cadre du recensement. Les deux premiers seront situés dans la Division du travail et dans la Division du commerce et des services et on espère pouvoir s'en servir à la fin de 1974. Le système informatique du registre des entreprises a été perfectionné de façon à utiliser les techniques modernes de gestion des bases de données. Le travail se poursuit également sur la mise au point de procédures informatiques et administratives hautement élaborées et sur l'introduction d'une opération officielle de coordination.

L'objectif de la Subdivision de l'accès aux dossiers fiscaux est de mettre au point des

de systèmes et des procédures d'extraction de données à partir des dossiers de l'impôt sur le revenu dans le but d'étayer ou de remplacer les données statistiques recueillies d'autres façons. Une partie de notre travail cette année a consisté à élaborer un système permettant l'identification et la relation d'entreprises non constituées en corporation à des industries spécifiques. Il a fallu établir des mesures strictes de sécurité pour le traitement des documents par Statistique Canada sans avoir à déranger le ministre du Revenu national.

Les systèmes mis au point marquent le départ d'un projet de trois à quatre années visant à définir le secteur des entreprises individuelles de l'économie. Ses buts sont les suivants:

- a) fournir une base pour le recensement du commerce et des services de 1976; et
- b) alléger le fardeau de réponse.

La Subdivision des profils a continué à établir les profils de référence de toutes les grandes entreprises de l'industrie canadienne, de travail comme l'identification d'une entreprise en ce qui a trait à sa forme juridique et à l'analyse de cette dernière en regard de ses structures d'exploitation et de ses méthodes comptables. L'analyse forme en dernier lieu la base d'une structure de déclaration statistique

terme, le profil est alors incorporé au registre des entreprises et numéroté de façon à disposer d'un code informatique pour fins d'enquête.

La subdivision travaille en étroite collaboration avec le Secteur de la statistique des entreprises tant pour la définition des profils que pour la définition des profils envoyés pour répondre aux demandes de profils et aux fins de revues industrielles. Chaque revue d'industrie comprend une recherche de base sur les concepts et définitions de l'industrie elle-même puis une définition du profil de toutes ses grandes entreprises. Au nombre des industries observées, mentionnons les services informatiques, les pâtes et papiers, les produits du bois et le pétrole. On a commencé le travail préliminaire sur l'industrie des services bancaires et financiers, et le secteur des services de transport fait maintenant l'objet d'une étude.

La Subdivision participe également à une révision d'enquêtes effectuée par la Division du travail pour le recensement du commerce et des

- V. R. Berlinguette, Statisticien en chef
adjoint
- Division des profils et des registres

Ce secteur produit des renseignements statistiques sur les prix, le travail, le commerce extérieur, l'agriculture, les transports et communications, le bâtiment et les travaux publics, les industries manufacturières et primaires et les industries de services.

compteurs postaux ont enregistré au total \$372,267,32.

Les Services de dactylographie et de transcription ont été assurés par cinq sous-sections

Trois sous-sections de dactylographie disposent d'un matériel de traitement des mots afin d'améliorer et d'accélérer le travail général de dactylographie. Des terminaux d'entrées sont utilisés pour de nombreux manuels et publications.

La Sous-section de l'ordonnancement et de la liaison a produit environ 12,000 pages de copie en vue de l'impression. Toutes les publications parues au cours de l'année financière, indépendamment de leur méthode de composition, ont fait l'objet d'une lecture d'épreuve.

La Section des services de gestion des documents a mis au point une méthode pour évaluer toutes les demandes de microfilmage de dossiers ou de matériel connexe émanant de Statistique Canada. Elle doit également tenir une liste à jour du matériel afin d'en assurer la disponibilité et l'utilisation maximale. Pendant l'année, l'Archiviste fédéral a reçu des demandes visant à transférer sur microfilms plus de 200 boîtes de bandes magnétiques et plus de 3 millions de pièces individuelles. En outre, on a envoyé 1,228 pieds cubes de dossiers au Dépôt des archives publiques pour fins d'entreposage et détruit 6,845 pieds cubes de dossiers périodiques.

À la fin de l'année, le Service des locaux administratifs 850,000 pieds carrés de locaux et d'espace d'entreposage. L'aménagement intérieur du nouvel immeuble R.H. Coats en collaboration avec le ministère des Travaux publics a constitué sa principale activité. C'est dans le concept de l'aménagement paysager qu'il a fallu intégrer le nouveau style des postes de travail. Les travaux de planification pour un autre immeuble ont débuté ainsi que la mise en place d'un nouveau mobilier à l'édifice de Statistique Canada. Celui-ci contiendra, une fois terminée, 1,300,000 pieds carrés de locaux répartis dans un complexe de bâtiments interreliés. Les services téléphoniques ont augmenté de 9 %, mais l'usage plus fréquent des interphones a fait régresser ce taux d'expansion.

Administration du personnel

Dans le cadre d'un programme visant à décentraliser les services et les activités en matière de personnel, on a créé cinq sous-sections depuis 1973. Chaque sous-section, qui dessert un ou plusieurs secteurs d'opération de Statistique Canada, a reçu la responsabilité de fournir à ces secteurs une gamme complète de services en matière d'administration du personnel.

Le personnel de ces sous-sections a surtout été puisé dans les sections centralisées. On projette actuellement de continuer à diminuer le rôle opérationnel de la Section centrale du personnel puisque ses activités sont maintenant prises en charge graduellement par les sous-sections décentralisées. La Sous-section centrale du personnel s'occupera d'abord et avant tout

des politiques de Statistique Canada en matière de personnel et de programmes d'évaluation.

Dotation en personnel

Au total, 1,087 employés permanents (dont 136 statisticiens et économistes) et 915 employés temporaires ont été embauchés au cours de l'année. Pendant cette même période, 1,847 employés ont quitté le service, dont 619 permanents et 1,228 occasionnels et temporaires. De ce nombre il y avait 68 statisticiens et économistes.

À la fin de l'année, on comptait 4,384 employés permanents et 754 employés occasionnels et temporaires.

Au cours de l'été 1973, on a procédé à l'embauche de 188 étudiants, dont 21 comme adjoints diplômés à la recherche et le reste à titre de commis. Il y a eu 324 concours restreints à Statistique Canada et 33 concours interministériels; 182 candidats ont été choisis à partir d'autres sources, par exemple le Fernalt et les dossiers du personnel. Pour leur part, les bureaux régionaux ont tenu 33 concours restreints et 6 portaient sur des promotions accordées par le système Fernalt ou à la suite de recherches dans les dossiers du personnel. De ce nombre, 7 ont été reçus, quatre ont été retirés et 1 est en cours d'instruction.

Formation

Plus de 2,300 employés de Statistique Canada ont suivi des cours de formation au cours de l'année. Le nombre d'inscriptions était pratiquement le même pour les deux sexes.

La majorité des cours, auxquels ont participé près de 2,000 employés, ont été dispensés à Statistique Canada. En voici la liste: système d'information, statistique, mathématiques, comptabilité, usage du téléphone, composition, théorie de l'échantillonnage, évaluation des tâches, surveillance, premiers soins, gestion, direction de groupes d'étude et planification de la retraite.

Plus de 200 employés ont suivi les cours de langue dispensés par le Bureau des langues de la Commission de la Fonction publique, tandis que 70 recevaient une formation semblable à Statistique Canada.

À la fin de l'exercice financier, sept employés étaient en congé d'étude en vue de l'obtention d'une maîtrise ou d'un doctorat.

Au cours de l'année, l'utilisation des ressources du Centre d'audio-visuel n'a cessé de croître puisqu'on a produit quelque 26 programmes comprenant environ 90 bandes magnétiques pendant cette période.

Classification

Statistique Canada a le pouvoir de classer environ 96 % de ses postes. Les postes de niveau

supérieur et quelques groupes communs à tous les ministères demeurent cependant la responsabilité du Conseil du Trésor.

Le bureau compte à son service des conseillers en matière de classification nommés pour chaque secteur afin d'aider au processus de classification de tous les groupes d'employés, sauf pour le petit groupe qui relève de la compétence du Conseil du Trésor.

Afin de conserver le haut niveau qualitatif des décisions de classification et de perfectionner les connaissances des services d'exécution dans le système de classification, six cours sur l'évaluation des tâches ont été donnés au cours de l'année financière et on prévoit continuer le programme.

Services du personnel

Conformément au programme de décentralisation, on a procédé à la réorganisation de la Sous-section des services du personnel, qui englobe le service de rémunération des employés de Statistique Canada.

Les langues officielles à Statistique Canada

Selon les directives approuvées par la Chambre des Communes et promulguées par le Conseil du Trésor, Statistique Canada a identifié les exigences linguistiques de chacun de quelque 4,400 postes permanents. Cette étude ardue a ensuite été complétée, d'une part, par l'analyse des compétences linguistiques des employés par rapport aux exigences des postes et, d'autre part, par la planification d'activités pour combler les lacunes.

Des postes permanents identifiés, 1,690 requièrent la connaissance des deux langues officielles. Des titulaires bilingues occupent présentement le tiers de ces postes. Les employés des autres postes bilingues devront acquérir une compétence en anglais et en français d'ici la fin de 1978.

Par contre, on trouve au sein des effectifs totaux de l'organisme, quelque 1,448 employés bilingues, c'est-à-dire qui ont réussi l'examen de connaissances de leur langue seconde et satisfait à la norme établie pour leur groupe occupationnel. Ces compétences linguistiques auxquelles s'ajoutent celles des 208 employés en cours de langues et le recrutement de personnel bilingue faciliteront le développement d'un bilinguisme institutionnel à Statistique Canada.

En outre, le régime linguistique des *Unités de langue française*, unités dont la principale langue de communication est le français, permet aux employés de ces groupes de travail d'œuvrer en français au sein de la Fonction publique tout en fournissant aux membres des autres unités de travail l'occasion d'utiliser leurs connaissances de cette langue. Ainsi, les fonctionnaires impliqués peuvent développer chez eux un bilinguisme individuel.

Au 31 mars 1974, toutes les publications périodiques de Statistique Canada étaient disponibles dans les deux langues officielles du pays.

La Direction de l'administration s'occupe de la production et de l'ordonnement, contrôle les finances et administre le personnel.

- Planification et ordonnancement de la production
- Services financiers et administratifs
- Administration du personnel
- Conseiller aux langues officielles

Planification et ordonnancement
de la production

La division a été établie en 1972 avec comme tâche première de réduire les délais de publication de Statistique Canada. Cet objectif devait

se réaliser par trois moyens d'action : une plantation à long terme afin de mieux répartir le travail ; un ordonnancement et un suivi veillant à court terme le jeu de la statistique nationale ; des visites régulières des sites d'implantation des unités de production afin de contrôler l'installation et de proposer des améliorations.

Après un examen approfondi de ses attributions, la division a abordé l'étape de la planification à long terme. Au cours de 1973-74, on a créé la Section de la planification de la production et, en collaboration avec les divisions spécialisées, on a quantifié les exigences de production de tout Statistique Canada et publié un calendrier de production échelonné sur deux ans. Ce calendrier sert maintenant à mesurer le rendement au niveau de la prévisibilité et de l'efficacité de la production.

En complètement aux activités de la division, la Section du développement a entrepris une série d'études en vue de produire et de mettre à l'essai des règles de priorité destinées à aider les décideurs en période de surcharge de travail, tout en reconnaissant la corrélation com-

plexe entre les différentes séries.

On vient également de terminer des études sur les coûts, les méthodes et la capacité de production qui seront appelées à fournir la base d'un système d'ordonnement

Services financiers et administratifs

Cette division comprend les services financiers, les services de production, la gestion des documents et le service des locaux.

Services financiers

Cette section a deux fonctions principales. Elle s'occupe des opérations financières, ce qui comprend l'examen et le contrôle des dépenses, la vérification des demandes et des comptes commerciaux et l'interprétation des règlements financiers, et agit à titre de conseiller pour les services d'exécution. La seconde fonction concerne la vente et la distribution des publications de Statistique Canada.

Afin de pouvoir répondre aux demandes croissantes et d'assurer la bonne marche des nouveaux programmes (système d'engagements internes, contrôle perpétuel des stocks) la division a fait installer en 1973-74 une machine de tenue automatique de 5 livres.

Le nombre de projets du Fonds renouvelable est passé de 170 (\$1,394,000) en 1972-73 à

242 (\$3,306,000) en 1973-74.

tion des publications s'est chargée d'un volume accru de courrier se rapportant aux publications. Les plaques d'adressographie pour la liste d'envoi ont augmenté de 270,000 à 284,000.

La Section des services de production fournit à tout Statistique Canada des services dans les domaines de la gestion du matériel, de la reproduction, de l'impression, de la gestion des formules, de l'adressographie, des envois postaux, de la dactylographie et de la transcription. Pendant l'année, on a traité 6,383 commandes totalisant \$2,987,476,61. La gestion des formules a appliqué à toutes les formules de Statistique Canada les nouveaux codes de comptabilité de section homogène introduits par les Services financiers.

On a aussi aidé à préparer les documents FOSDIC pour le recensement de 1976. Dans la sous-section de l'adressographie, on

a adressé 16,039,123 formules; 115,519 pièces ont été gravées, 146,164 ont été corrigées et on en a annulé 172,621 autres. Le nombre total d'envois postaux s'est chiffré à 5,738,738. Elle a envoyé 21,481 sacs de courrier au bureau de poste et en a reçu 8,604. Pendant l'année, on a manipulé 57,809 envois qui contenaient de l'argent, des chèques ou des mandats de poste à titre de paiement pour des publications. Les

Politique, planification et évaluation

D. A. Worton, Directeur général

- Planification stratégique
- Opérations de planification
- Évaluation des programmes

La Direction de la politique, de la planification et de l'évaluation est chargée de la planification stratégique et à moyen terme et de la planification et de l'évaluation des programmes; elle agit aussi à titre de conseiller en matière de priorités statistiques. La direction, créée en 1973, comprend les divisions de la planification stratégique, de l'évaluation des programmes et des opérations de planification. Ces divisions se sont consacrées dans les premiers mois de l'année 1973-1974 à préciser en détail leur rôle, à mettre au point les plans de programme et à recruter du personnel.

Division de la planification stratégique

Cette division a pour rôle de coordonner les plans à moyen terme des principaux secteurs spécialisés et de les intégrer dans les plans d'ensemble de Statistique Canada. Sa première tâche d'importance a concerné le Secteur des ménages et des institutions et les divisions spécialisées, y compris le recensement. Ce travail, qui se poursuivra en 1975-1976, portait sur la mise au point d'un plan à moyen terme touchant les statistiques sociales et socio-économiques connexes.

Division des opérations de planification

La division est responsable du système d'information de Statistique Canada connu sous le nom de Système de comptabilité analytique et de surveillance de la gestion (P.R.A.C.A.S.), et s'efforce de l'intégrer davantage au processus de planification. On a commencé à élaborer un nouveau système de proposition de projet dont la mise en oeuvre est prévue pour 1974-1975. Ce système servira en définitive à traduire sous forme de propositions spécifiques en vue de la prévision annuelle des programmes de Statistique Canada, les besoins immédiats au titre des plans à moyen terme. Vers la fin de l'année financière, la division a entrepris la création d'un nouveau système de coordination des comités.

Introduction

L'honorable Alastair Gillespie, C.P.,
Ministre de l'Industrie et du Commerce,
Ottawa (Ont.).

Monsieur le Ministre,
J'ai le plaisir de vous présenter le rapport
annuel de l'activité et des services de Statistique
Canada au cours de l'année financière close le
31 mars 1974.
Recevez, Monsieur le Ministre, l'assurance de
ma très haute considération.

Sylvia Ostry

Le statisticien en chef du Canada

La réorganisation de Statistique Canada avait pour but d'améliorer les services centraux de statistiques juste avant le début de l'exercice financier. On a donc réorienté quelques fonctions et, dans certains cas, créé de nouvelles divisions afin de répondre aux demandes croissantes auxquelles l'organisme central avait à faire face. Ce rapport souligne l'activité dans le cadre de la première année de cette nouvelle organisation.

21	Ménages et institutions
22	<ul style="list-style-type: none"> • Direction de la statistique des ménages • Division de l'enquête sur la population active • Division du revenu et des dépenses des consommateurs • Division de la coordination des enquêtes spéciales
23	Direction des institutions et des finances publiques
24	<ul style="list-style-type: none"> • Division des finances publiques • Division de l'éducation, des sciences et de la culture • Division de la santé • Division de la statistique judiciaire
26	Services statistiques
27	<ul style="list-style-type: none"> • Elaboration d'enquêtes 'ménages' • Méthodes d'enquêtes 'entreprises' • Méthodes de recensement et d'enquêtes 'institutions' • Division des opérations régionales
28	
30	
31	<ul style="list-style-type: none"> • Systèmes informatiques et traitement des données • Division de la recherche en automatisaion, de la planification et de la vérification • Division du traitement des données • Systèmes généraux d'enquêtes • Division des systèmes informatiques
33	Services de diffusion et de promotion
	<ul style="list-style-type: none"> • Division de l'information • Bibliothèque • Services de l'assistance-utilisateurs
35	Secteur du recensement
	<ul style="list-style-type: none"> • Coordinateur, Rapports avec les utilisateurs • Coordinateur administratif
36	Direction du contenu et de l'analyse
37	<ul style="list-style-type: none"> • Division de la planification à long terme du recensement • Division des estimations et des projections démographiques • Division des caractéristiques du recensement • Division du recensement de l'agriculture
38	<ul style="list-style-type: none"> • Direction de la production • Division de la saisie des données • Division du traitement des données du recensement • Division de la diffusion des données

Table des matières

4	Introduction
5	Politique, planification et évaluation Division de la planification stratégique Division des opérations de planification Division de l'évaluation des programmes
6	Administration Planification et ordonnancement de la production Services financiers et administratifs Administration du personnel Conseiller aux langues officielles
8	Entreprises Division des profils et des registres d'entreprises
9	Statistique industrielle Division de l'agriculture Division des industries manufacturières et primaires
10	Division des transports et des communications
11	Division du commerce et des services Division de la construction
13	Statistique générale Division du commerce extérieur Division des prix Division des finances des entreprises Division du travail
16	Comptes économiques et intégration Coordonnateur, Statistique financière Conseiller supérieur en intégration
17	Système des comptes nationaux (courants) Division du produit national brut Division du produit industriel Division de la balance des paiements Division des flux financiers et des EMN Division des analyses de conjoncture
19	Système des comptes nationaux (structurels) Division des normes Division des entrées-sorties Division de la recherche et du développement en statistiques urbaines et régionales Division de l'analyse structurelle et recherche en productivité
20	

1973-1974

Rapport annuel

Année financière close le 31 mars

1-0000-502
Catalogue 11-201
Information Canada,
Ottawa.

1973-1974 Rapport annuel

Année financière close le 31 mars



Statistics
Canada

Statistique
Canada

Statistics Canada Annual Report 1974-1975

11-201

**Statistics Canada
Annual Report
1974 - 1975**

For the fiscal year ended March 31

1-0000-502
Catalogue 11-201
Statistics Canada
Ottawa

Contents

5 Policy, Planning and Evaluation Branch

Strategic Planning Division
Planning Operations Division
Program Evaluation Division

6 Business Statistics

Business Register and Profiling Division

Industry Statistics Branch

Agriculture Division

7 Manufacturing and Primary Industries Division

Transportation and Communications Division
Merchandising and Services Division

8 Construction Division

General Statistics Branch

External Trade Division

9 Prices Division

Business Finance Division
Labour Division

11 Economic Accounts and Integration

Co-ordinator, Financial Statistics
Senior Advisor on Integration
System of National Accounts (Structural)
Standards Division
Input-Output Division
Regional and Urban Research and Development Division

12 Structural Analysis Division

System of National Accounts (Current)

Gross National Product Division
Balance of Payments Division
Industry Product Division
Financial Flows and Multinational Enterprises
Current Economic Analysis Division

14 Household and Institutional Statistics

Household Statistics Branch

Labour Force Survey Division
Consumer Income and Expenditure Division

- 15** Special Surveys Co-ordination Division
 - Institutions and Public Finance Branch**
 - Public Finance Division
 - Education, Science and Culture Division
 - Health Division
- 16** Judicial Division
- 17 Statistical Services**
 - Household Surveys Development Staff
 - Business Survey Methods Division
- 18** Census and Institutional Survey Methods Division
 - Field Division
 - Systems and Data Processing Branch**
- 19** Systems Development Division
 - Data Processing Division
 - General Survey Systems Division
 - Automation Research, Planning and Audit Division
- 21 Marketing Services**
 - Information Services Division
 - User Advisory Services Division
 - Statistics Canada Library
- 22 Census**
 - Population Studies and Statistics Division
 - User Relations
 - Content and Analysis Branch**
 - Census Long-Range Planning Group
 - Census Population Estimates and Projections Division
- 23** Census Characteristics Division
 - Census of Agriculture Division
 - Production Branch**
 - Data Capture Division
 - Data Dissemination Division
- 24** Census Processing Division

The Honourable Don Jamieson
Minister of Industry, Trade and Commerce,
Ottawa, Ontario.

Sir:

It is with pleasure that I submit to you the
Annual Report of Statistics Canada covering
the operations and services during the fiscal
year ended March 31, 1975.

Respectfully submitted,

Peter G. Kirkham
Chief Statistician of Canada.

Policy, Planning and Evaluation Branch

The Policy, Planning and Evaluation Branch advises the Chief Statistician on a broad range of bureau-wide policy issues going beyond the responsibilities of particular organizational units. These include departmental objectives, overall program priorities, the bureau's role within the national statistical system, and its relations with other elements of the system. The Branch comprises three divisions.

Strategic Planning Division

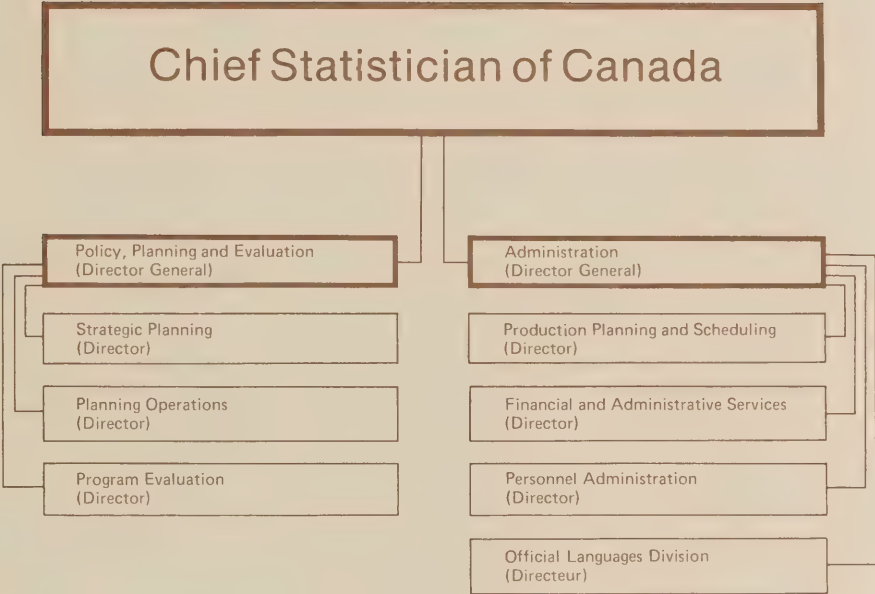
This division co-ordinates the development of objectives by fields and advises on their synthesis into overall bureau objectives. It aids in development of program plans and advises on their implementation. During 1974-75 the Division's efforts were directed toward the bureau's social statistics programs including the planning for the 1981 Census.

Planning Operations Division

This division is responsible for translating plans into specific operational proposals for the department's annual program forecasts. It operates the bureau's project-based management information system, and uses it for monitoring the use of assigned program resources. During 1974-75 the Division conducted a major review of the system.

Program Evaluation Division

This division has responsibility for evaluating the efficiency and effectiveness of all aspects of the bureau's programs. During the fiscal year it began development of an operational performance measurement system.



Business Statistics

The Business Statistics Field is responsible for the collection, processing and publication of statistics from business firms. The Field is divided into two branches — Industry Statistics and General Statistics. The former is responsible for statistics on Agriculture, Manufacturing and Primary Industries, Transportation and Communications, Merchandising and Services and Construction. The General Statistics Branch is responsible for statistics on Prices, Labour, Business Finance and External Trade.

In addition, the Business Register and Profiling Division forms part of the Business Statistics Field. Its principal function is to maintain a comprehensive list of all companies and business establishments subject to surveys by the bureau.

Information produced by the Business Statistics Field makes up the largest component of statistical input to the National Accounts and at the same time provides a wealth of information dealing with all aspects of business activity in the country.

Business Register and Profiling Division

The Business Register and Profiling Division consists of three sub-divisions: Business Register, Profiling, and Tax Record Access.

Business Register

In general, 1974-75 has been spent on integrating the activities of the three sub-divisions, a program which will continue through 1975-76.

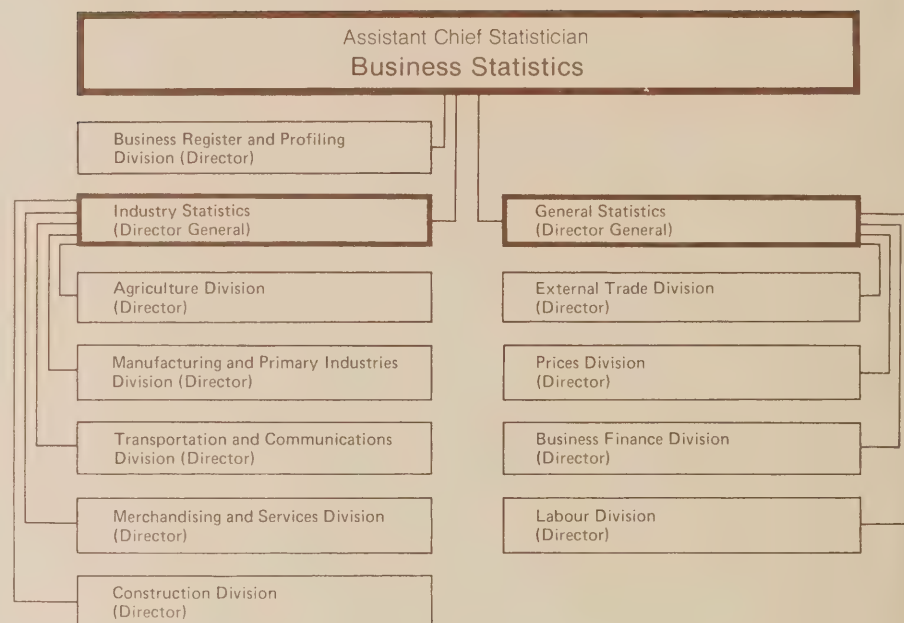
This sub-division is responsible for the Statistics Canada Business Register which became operational early in 1972. The Register covers all employers in Canada, whether incorporated or not, and is being extended to include corporations which are not employers.

Divisional master file systems, which operate in conjunction with the Business Register to provide facilities directly to the survey-taking processes, have been implemented in Labour Division, are in an advanced state of development for Construction Division, and are in the initial stages of implementation for Business Finance, Transportation and Communications, and Merchandising and Services Divisions.

The business register computer system has been upgraded to use modern data-base maintenance facilities and is currently undergoing parallel runs. It will be introduced in 1975.

Profiling

While continuing to provide profiling services for the Business Statistics Field, this sub-division is undertaking a major study of the introduction of systematized procedures into the profiling operation. Profiling is defined as the operation of delineating and recording a reporting structure for a bureau survey or group of surveys. Procedures are being developed and a computer system is being implemented which will result in a more-efficient, uniform and well-documented



process, and which will increase the sub-division's capacity to fulfill the needs of the survey-taking divisions for up-to-date and scrupulously delineated reporting structures.

Tax Record Access

Last year, the Tax Record Access Sub-Division developed, checked-out and used the systems and procedures for retrieval of data from taxation records to supplement or replace statistical data collected in other ways. Taxation data for businesses are becoming available in a form that can be used by the survey-taking divisions and thereby reduce respondent burden. This work is concentrated, in the short term, in the areas of manufacturing industries and, in the longer term, towards the preparation of a list of businesses and of making taxation data available for the 1981 Census of Merchandising and Services.

Industry Statistics Branch

Agriculture Division

The Agriculture Division is responsible for collection, evaluation and publication of information on the agricultural industry. Its program is conducted in co-operation with federal departments and agencies, especially Agriculture Canada, provincial government departments through joint participation in some surveys and by other arrangements.

An enumerative sample survey, begun in 1972 to replace five-year benchmarks with annual benchmarks in statistical estimates derived from data collected in mail surveys, is still under development. The survey collects

basic information from 8,000 farms (9,000 in 1976) and is expected to be operational in 1976.

A full-scale test of advance and reminder cards used in mailed surveys resulted in adoption of advance cards for the semi-annual survey of crops and livestock and both advance and reminder cards for the low-response areas.

The use of the farm register system, by eliminating duplication between samples, has permitted an increase in the sample size during 1974 in several commodity surveys while lessening response burden on farm operators. Computerized sampling also saved time over previously used manual methods.

The CANSIM* data base for agriculture was updated with the inclusion of information from the quinquennial Census of Agriculture.

The Farm Income and Prices Section has the continuing responsibility of producing statistical series on the financial aspects of the farm sector. A critical review of the adequacy of these series for both the community at large and the Canadian System of National Accounts was initiated during the year and is expected to continue.

The Division was involved in two programs dealing with farm income: one used income-tax records to determine income from agricultural and non-agricultural sources, and the other used tax information from Prince Edward Island to produce more-reliable estimates of farm and non-farm incomes for sub-provincial regions.

The Crops Section deals with field and horticultural crops and publishes information on acreages, growing conditions, yields, crop production, stocks of grain and prices received by farmers and on the grain milling and oilseed crushing industries.

*CANSIM— See footnote, pg. 13

Data from these surveys and other sources provide continuous studies of the supply, movements and trade of Canadian cereals, feed grains and oilseeds. An agriculture reporting program on world trade in grain and oilseed crops is maintained through the co-operation of the Canadian Trade Commissioner Service.

The Livestock and Animal Products Section provides statistical information on the Canadian livestock industry. The Section increased its analysis of the agriculture enumerative survey for livestock during the year to improve the interpretation of sample indications. Full use of these indications is planned for July 1975.

An alternative method of estimating total milk production, based on purchases by dairies and dairy plants is now operational.

The pilot survey of pigs in Ontario was put on a new basis during the year using information from the census of agriculture and Ontario Pork Producers Marketing Board.

Consultations aimed at the production of more-useful statistics without duplication of effort or imposing extra burdens on the poultry producers were undertaken with provincial egg boards, the Canadian Egg Marketing Association and Food Products Marketing Council. This work will continue into next year.

Manufacturing and Primary Industries Division

The Division's activities during the year were concentrated primarily on greatly increased consultation with government and industry, on consolidation and extension of its automation program, and on a modest expansion in special analytical studies.

Rapidly changing conditions on both the international and domestic fronts, particularly in energy, the environment and on Canada's competitive position in trade in manufactured products, created increased demand for special studies and co-operative arrangements for collection and analysis of data. Typical of this intensified activity was the increased consultation with the provinces on all aspects of the Census of Manufactures in order to maximize the benefits from elimination of duplication in collection, and in automation of data processing.

A special question on the province of first destination of manufacturers' shipments, as well as on shipments exported directly, was included in the 1974 Census of Manufactures questionnaires to update the first such study undertaken for the 1967 census year. Lists of establishments, last published in the 1967 Census of Manufactures reports on individual industries, were reinstated in the 1973 reports to meet an obvious need.

As an extension of the Division's program of studies of industrial concentration, planning was begun for the measurement of concentration of manufacturing shipments of particular commodities to facilitate studies in competitive conditions. Preparatory work was also done on a system for eventually generating data on user-specified non-standard geographic

areas by recording on magnetic tape the physical location of manufacturing establishments. The system will use block-face geographical co-ordinates similar to that already in the GRDSR* system operated by Census.

Transportation and Communications Division

This Division surveys transportation and telecommunications industries, movements of goods and persons, and related infrastructures. It provides information, in the form of detailed reports and publications to users, especially administrative and regulatory agencies of government.

An interdepartmental committee on shipping statistics, set up in August 1973 to formulate policy guidelines for a new water-transport statistical system, submitted its report in June 1974. Critical requirements of users were identified in the six major information areas: vessel operation, cargo movement, ship registries, port activity, inland mode used to complete the movement, and financial statistics.

The report proposed that a new industry data base be established to meet the needs of all users, particularly those of government. In response to a recommendation calling for a more-comprehensive coverage of the Canadian water-transport industry, a special survey was launched to determine the nature and extent of an enlarged universe.

A similar project, begun three years ago in the road transport area, was completed this year. As a result, new motor-carrier industry questionnaires, reflecting a major assessment program, were sent to a mailing list of 28,000. Preliminary results show response in excess of expectation.

The For-hire Trucking Survey, believed to be the most comprehensive in the world on movements of goods by motor carrier, began its fifth survey year. Development of more-efficient sampling procedures for 1974, permitted a 40% reduction in sample size and a substantial decrease in field costs but retained comparability of data with previous years. The unique methodology, which draws information directly from the respondents' files, was also retained. The survey is now considered stable.

The "Road and Street Mileage Report", retitled "Length of Public Roads and Streets" was the first divisional form to be designed to give the respondent the option of reporting in metric units.

A survey of freight forwarders conducted for the Canadian Transport Commission and a Pleasure Watercraft Accident Survey requested by the Marine Safety Branch of Transport Canada explored hitherto untouched areas of transportation-related statistics.

Merchandising and Services Division

The division's organizational plan developed last year is now being implemented. It is intended to simplify reporting procedures, place greater responsibility and accountability

on the chiefs and to permit more effective analyses of the distributive trades.

Distributional Analysis

This Section, responsible for market research studies and various types of analysis, began work on a market research handbook, is planning a study of shopping centre complexes and is updating *Trends in Canadian Marketing*.

Census of Merchandising and Services

Processing and analysis of the data from the 1971 Census of Merchandising and Services continued during the year. This preliminary analysis identified some of the weaknesses of the data and provided more insight into the extent of the work still required before publication.

Because of time and resource constraints, and partly because of the impact of the 1971 Census on these constraints, the 1976 Census of Merchandising and Services was cancelled.

Retail Trade

In January 1975, the Retail Trade Section commenced publication of data obtained from a new sample which includes: monthly estimates of trade for Montreal, Toronto, Winnipeg and Vancouver; a separate estimate for the Territories; and the facility to provide revisions to the data for late-response and errors.

Chain Store Sales and Stocks (63-001), was discontinued with the December 1973 issue because data became available in *Retail Trade* (63-005) and *Merchandising Inventories* (63-014).

The monthly *Department Store Sales and Stocks* (63-002) was completely re-designed and the annual *Retail Chain Stores* (63-210) was expanded. Annual publications released during the 1973-75 period, included *Retail Chain Stores* (63-210), *Shopping Centres in Canada* (63-214), and *Voluntary Group Stores* (63-215).

Wholesale

The Wholesale Trade Section maintained its regular program of monthly publications of sales and inventories for wholesale merchants and sales of farm implements and equipment. The 1973 annual series for farm implements and equipment, construction machinery and equipment, and diesel and natural-gas engine sales were released during the year with improved timeliness. Discussions with members of the trade for diesel and natural-gas engines led to a new reporting procedure featuring a report card for each engine sold. This new method is designed to relieve the burden on respondents and eliminate duplication in the reporting of engines.

A biennial census of wholesale merchants for the 1973 business year was in final processing at year end. Mail-out of a biennial survey of agents and brokers covering the 1974 business year was completed in March 1975 with the completion date scheduled for the fall of 1975.

*GRDSR— See footnote, pg. 24

Commerical Services

During the year the Commercial Services Section added surveys on *Franchising in Canada's Food Service Industry* (63-524) and the *Computer Service Industry* (63-222); the traveller accommodation program was automated for 1972 and preliminary 1972 information was released as the year ended.

An evaluation of restaurant data collected through the new retail trade survey was conducted and results are expected in January 1976. This program will replace the monthly Survey of Restaurants and provide data on receipts by kinds of restaurants.

A comprehensive review of current commercial services surveys was undertaken to determine the most effective approach to program development for the services sector in the future. This work will continue into the new year.

Non-commercial Services

The Non-commercial Services Section has two programs in the final stages of preparation and the following new publications are expected next year: *Religious Organizations, 1971*; *Other Charitable Organizations, 1971*; *Industrial and Trade Associations, 1973*; *Religious Organizations, 1972 and 1973*; *Other Charitable Organizations, 1972 and 1973*.

Development of survey programs in such other non-commercial activities as fraternal organizations, service clubs, labour organizations, political organizations, etc., is progressing.

Consumer Credit and Special Projects

This section is responsible for maintaining and publishing national estimates of consumer credit outstanding with selected holders in retail merchandising firms and financial institutions. Information is published in the monthly bulletin *Consumer Credit* (61-004). Since the last report the cash advances of trust and mortgage loan companies have been included among the outstandings of selected holders of credit and the monthly statistics are now also available in seasonally adjusted form.

Monthly statistics on the retail installment sales financing of consumer goods, are published in the monthly bulletin *Sales Financing* (63-013). Recent issues have included provincial breakdowns for a wider range of consumer goods, and commercial and industrial goods as well as motor vehicles. Historical statistics, back to 1956, are now available for all principal sales financing statistics in CANSIM*.

Commodity and Operating Results

The Commodity and Operating Results Section is engaged in a retail commodity survey of 42,000 retailers covering the business year 1974 and publication of the results is expected in October.

Divisional Master File

During 1974-75 initial steps were taken to construct a merchandising divisional Master File with preliminary matches performed between the Business Register and name and address files from the new Retail Trade Survey, the Wholesale Merchants Survey, and the Travellers' Accommodation Survey.

Construction Division

To satisfy the need for information on capital formation for provincial and sub-provincial areas in Canada the Construction Division, during the year, directed its activities toward the greater use of existing data, joint collection agreements with provincial governments, the further development of the use of administrative records for statistical purposes and the integration of statistical surveys.

Private and Public Investment in Canada, Outlook and Regional Estimates (61-205) was redesigned to provide more-detailed information by province, and discussions on joint collection arrangements for capital and repair expenditures data have been held with some provinces.

During the year some detailed historical capital and repair expenditures data were transferred to the CANSIM* data bank, the quarterly sample of surveys of capital expenditures was expanded and integrated with the quarterly financial survey, techniques were developed to match the quarterly financial survey, techniques were developed to match the quarterly aggregations of consolidated corporate totals with detailed annual data by establishment, and work is continuing on developing quarterly estimates.

Statistics on capital stocks are now available in a preliminary form for a large number of manufacturing industries and basic capital stock information based upon differing life assumptions has been incorporated into the CANSIM data base. A new annual publication, *Fixed Capital Flows and Stocks* (13-221), presents estimates of fixed non-residential capital stock and flows for the economy for a wide range of industry groups.

Research undertaken to provide measures of the use rates of capital stock in Canadian industry has been successful and regular publication of industrial use rates in Canadian manufacturing by quarters is expected.

Work was undertaken on the transfer to magnetic tape of building permits statistics for 1957 to 1971, inclusive, to produce, by computer, time series by province, economic region, metro area, census division and individual municipality.

Computer systems analysis was undertaken to develop a statistical program of construction information capable of producing sub-annual estimates of construction work, by province, for major categories of non-residential building construction; the census of the construction industry was extended to include all trade contractors; work progressed on the use of the Business Register master file to create a mailing list of all business organizations in the

industry; and computer systems are being developed for automated mailing and processing of the statistical data.

During the year information on new and repair construction expenditures by type of construction for years 1952 to 1975 was incorporated into the CANSIM data base.

General Statistics Branch

External Trade Division

The External Trade Division continued to meet its primary objective of publishing reports on Canada's merchandise trade with other countries. While the source of these reports is mainly records of importers' and exporters' declarations to Revenue Canada, several large importers and exporters supplement these with reports on their transactions submitted directly to Statistics Canada.

The External Trade Division relied heavily on the Customs and Excise arm of Revenue Canada for complete information on the nature of merchandise trade transactions and provided Revenue Canada with specialized classification clerks who monitored the accuracy of the coding of import declarations by importers and their agents. These clerks were stationed at nine major Canadian customs ports which together handle most import declarations.

The Division was also active in the analysis of merchandise trade data, and its research on ways of measuring changes in prices and quantities of exports and imports was embodied in a paper presented to the United Nations conference of European statisticians. Another paper on measuring discrepancies in bilateral trade data, written in collaboration with the U.S. Bureau of the Census, was presented at the 18th session of the United Nations Statistical Commission.

The External Trade Division continued to co-operate with the U.S. Bureau of the Census in a program designed to produce reconciled statistics on the trade between the two countries. This program, which started in 1972 now produces reconciled annual estimates some four months after the year end and estimates of reconciled quarterly data.

The Division's heavy investment in automated systems, central to its activity in the last four years, now permits a greater range of external trade data as well as a greatly reduced lag in response to unforeseen requests for data. For example, the Division played an important role in designing and producing trade statistics broken down by customs tariff as part of Canada's brief for the forthcoming GATT tariff negotiations, and expanded its supply of data broken down by Canadian province to provincial government analysts interested in the regional origin and destination of Canada's foreign trade. The Division's direct supply of data to users in the private

*CANSIM— See footnote, pg. 13

sector increased several fold particularly in the form of data recorded on magnetic tape.

As part of the development of its publications, the External Trade Division introduced a microfiche service to users of its data which now extends to monthly, quarterly and annual statistical reports.

Prices Division

Prices Division collects, compiles and publishes data on prices at all levels of economic activity. It comprises three subject areas:

- Retail prices and living costs, measuring price movements and differentials as they relate to changes and differences in consumer prices in Canada and between Canada and other countries;
- Industrial prices, relating to the production and distribution of commodities and services; and
- Research and development, co-ordinating research and analysis in areas common to retail and industrial prices.

In January 1975 a new series of additional early tabulations was released which form a more-comprehensive and timely record of current retail prices movements. Now, at the CPI release time, more than four times as many separate component indexes than were previously published are available and one, for the first time, shows changes in the CPI on a seasonally adjusted basis.

Also starting with the January 1975 release of the city CPIs, the amount of detail for each city was increased four fold to about 30 component series. Publication of separate monthly CPIs for Saskatoon, Regina, Edmonton and Calgary, going back to April 1973 commenced in November 1974, and detailed weighting diagrams of the CPI at the city level were made available in September 1974. Production of a CPI for Charlottetown and PEI is nearing completion.

The Division published:

- An expanded supermarket survey, conducted in October 1974, to measure average prices for 56 comparable supermarket items in 14 cities;
- The first five components in a series of updated place-to-place consumer price-relationship studies, on a component-by-component basis;
- Monthly price indexes for new single-family houses for six metropolitan areas;
- Indexes on fabricated steel in place and precast concrete.

In support of the Canadian government system of allowances for federal employees, the Division conducted 48 full-scale and eight abbreviated retail-price and living-cost surveys for the Canadian foreign-service allowance system and, after conducting surveys in remote areas in Canada, produced indexes for 72 isolated posts.

The Division continued development of the contractor's selling-price system of indexes;

took steps toward production of an integrated series of price indexes for the transportation sector; undertook a complete revision of the securities price index to a 1971 time and weight base; continued development of an improved series of energy-price indexes; revised the industrial selling price indexes with enlarged coverage, computerized processing, new weights and a 1971 time base; continued the integration of industrial prices under the framework of the input-output tables; and undertook investigations into export pricings aimed at producing new price indexes to complement and supplement the unit-value indexes presently produced from foreign trade data.

Business Finance Division

During fiscal year 1974-75 the division continued production of statistics on corporations, their financial activity and significance to the Canadian economy.

In addition, financial and membership data were collected and published for labour unions, and statistics on ownership and control of corporations, as required by CALURA, the Corporations and Labour Unions Returns Act.

In 1974-75 the quarterly survey of industrial corporations improved its coverage and quality while reducing the burden on respondents by integrating the survey of capital expenditures with the industrial corporations survey of financial statements. All questionnaires (except those sent to real-estate operators and developers) and the reporting guides for respondents were revised.

For real-estate operators and developers the sample size was doubled to provide increased coverage, the publication format was changed to make it more compatible with the detail requested on the questionnaires and more-vigorous follow-up resulted in improvements in the response rate.

Starting with the third quarter of 1974, preliminary financial data were published 45 days after the reference quarter — a significant improvement.

Financial Statistics (61-006) —released about one month earlier than previously — included for the first time, data on chartered banks and the finance leasing industry, the latter made possible by development of improved coverage and response. The published industry data in this quarterly became available on the CANSIM* data bank during the year.

Also improved was coverage of investment dealers (doubled), investment holding companies (tripled) and coverage of mutual funds which increased by about 30%.

Two other reports, *Commercial Failures* (61-002) and *Credit Unions* (61-209), were also improved during the year, the latter through a revised questionnaire.

The annual report *Corporations and Labour Unions Returns Act — Part I* (61-210 on corporations for year 1972, was tabled in Parliament slightly earlier than last year, and two important new sets of data were added: a source-and-application-of-funds statement and

a balance-sheet and income-and-expense statement that covered both foreign and Canadian-controlled corporations.

The annual CALURA report to Parliament on labour unions (71-202) was released in August, an improvement over previous years.

A new edition of *Inter-corporate Ownership* (61-512) based on 1972 data was released updating the previous edition which contained 1969 data. The ultimate degree of non-resident ownership of each corporation listed was included for the first time.

Also published were: the 1971 edition of *Corporations Financial Statistics* (61-207) containing expanded financial and industrial detail, and *Corporation Taxation Statistics* (61-208) for 1971, containing expanded detail on the distribution of taxable income.

Labour Division

The Labour Division is concerned with statistics on employment, labour income, employer labour cost, occupational employment, job vacancies, pension plans and statistics relating to the operation of the Unemployment Insurance Commission and Canada Manpower centres.

The second occupational employment survey which commenced in January 1975 included improvements over the 1973 survey: the monthly employment and payrolls survey's reporting units were employed to simplify collection procedures, and the amount of industry detail available to the provinces was increased. Information on job vacancies was supplemented during the year by the release of annual averages of minimum hiring rates for the 1971-74 period. These pay data provide an additional dimension in the use of job-vacancy data for labour-market analysis.

A new quarterly press release "Advance Statistics on Job Vacancies", initiated in September 1974, resulted in summary data being made available to users some eight weeks before publication in the *Quarterly Report on Job Vacancies* (71-002). Detailed data is available on request.

A new system of sample rotation introduced into collection of job-vacancy and employment data for small firms in January 1975 will lessen the burden on respondents by reducing the average time any particular firm is retained in the sample.

A survey of employer labour cost in education using, for the first time, mail-out and follow-up by the regional offices indicated that for small surveys this procedure offers the possibility of reducing costs and improving timeliness.

A study of record-keeping and reporting practices in the forestry industry east of the Rocky Mountains was conducted during 1974 to assess the relevance to the industry of concepts used in the monthly employment and payrolls survey, the ability of employers to report the employment and payroll data, and

*CANSIM— See footnote, pg. 13

the quality of the information reported.

A detailed report on a special survey of employment, earnings and hours of work in the finance, insurance and real estate industry provided separate employment, earnings and hours statistics for males and females, full-time employees and part-time casuals for five major occupational groups and three major industry groups.

The 1973 edition of *Notes on Labour Statistics* (72-207) containing five articles on such subjects as errors associated with gross flow estimates and private pension fund reserves was issued in March 1975, and two articles in the manpower research studies program were issued, "Short-term Variation in Student and Non-Student Participation Rates" and "Working Mothers in Canada".

Economic Accounts and Integration

This Field consists of the System of National Accounts (Current), and the System of National Accounts (Structural), the Senior Advisor on Integration and the Co-ordinator of Financial Statistics.

The Current Accounts Branch is responsible for production, analysis and dissemination of the system of national accounts — with the exception of input-output tables — and for current economic analysis.

The Structural Accounts Branch is responsible for benchmark estimates, for structural economic model development and operation — including the input-output tables — for the development of standard classification systems necessary to the integration of the bureau's economic statistical output, and for the development of standard classification systems and structural research.

Co-ordinator, Financial Statistics

In co-operation with provincial officials, available information on mortgages is being expanded by the tabulation of records of mortgage registrations. Discussions have been held with all provinces and several are now producing information.

In computer communications, a classification of computer hardware has been distributed and work is well advanced on documenting the supply and use of computer-communications hardware and services.

Senior Advisor on Integration

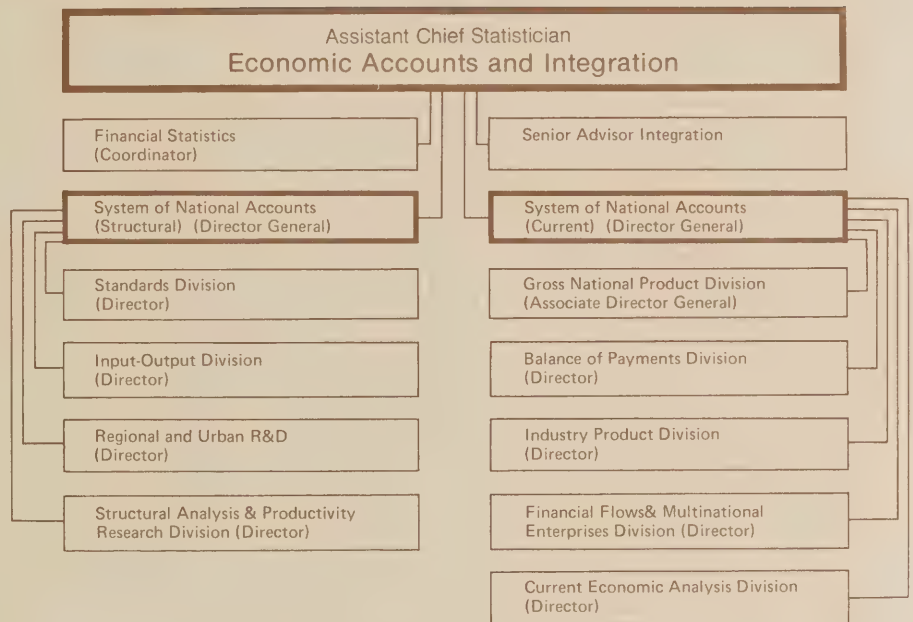
Under the supervision of the Senior Advisor on Integration, the compilation for *Perspective Canada*, a compendium of social statistics, was completed and the volume was published in the fall of 1974.

Encouragement from users of the publication at an Ottawa seminar prompted the decision to publish further issues of *Perspective Canada* at irregular intervals. The second edition is now underway.

A preliminary investigation of the feasibility of a net welfare measure resulted in preparation of "A review of recent proposals for modifying and extending the measure of GNP", a paper reviewing possible extensions to the GNP.

The staff completed a pilot project on urban environmental indicators dealing with transportation and access to recreation in the Ottawa area.

Also through this office, Statistics Canada directs an interdepartmental committee that will plan and monitor the development of environmental data in Canada. Work on a framework for environmental data was initiated, and preparations for a handbook on data with environmental implications were begun.



System of National Accounts (Structural)

Standards Division

The Standards Division is responsible for control of classifications and concepts for the bureau. During the year it participated in a bureau-wide effort to improve data documentation, did preliminary work on the impact of metrication and contributed to the work of an interdepartmental committee on the coding and classification of financial transactions of the federal government.

Work continued on the standard classification of occupations, commodities, industries and services and on a standard geographical classification.

Occupational Classification

This unit provided consultative and support services to those responsible for the occupational data derived from the 1971 census, occupational coding associated with the post-censal highly qualified manpower survey and the occupation employment survey. Discussions started with the Department of Manpower and Immigration on revisions to the Canadian classification and dictionary of occupations to identify differences between this classification and the occupational classification manual used for the '71 census. It will hopefully strengthen the Canadian Classification and dictionary of occupations.

Commodity Classification

Development of the revised standard commodity classification continued. The classification by principal commodity groups was transferred

from the Input-Output Division and the process of reconciling this classification with the standard commodity classification will determine the form of volumes II and III of the revised classification.

Standard Geographical Classification

Publication of the first edition of the standard geographical classification is expected in 1975.

Classification of Services

A second draft of the classification was distributed for comment from which a final version of the services classification is expected.

Input-Output Division

This division is responsible for the development of annual input-output tables, for the benchmark project which is intended to provide fully integrated final revisions to the production accounts within the system of national accounts, and for measuring labour productivity in the commercial industries and in some subsidiary industry aggregations.

During the year, annual input-output tables for 1962-66 were completed and summary tables were published in the February 1975 *Canadian Statistical Review*. The division resumed production of aggregate productivity measures; revised productivity estimates for 1946-72 were published in August 1975.

Regional and Urban Research and Development Division

This division is responsible for development of an urban data base accessible to users through CANSIM*. The work is carried out with the

co-operation of bureau divisions providing the data.

Structural Analysis Division

This division is responsible for the development and operation of structural economic models of the Canadian economy. Its program aims to provide a framework within which economic statistics can be integrated and evaluated; to make available analytic information to those concerned with economic decision making; to provide channels of communication between the collectors of statistics and those who use statistics for economic analysis; to provide consultative services and assistance in the operation of models. User specific consultative services are provided on a cost-recovery basis.

The input-output and price models, described in the Users Guide to Structural Economic Models, were available to users during the year.

Three additional models are expected to be operational and available in 1975:

1. Long-term model — A computational framework within which long-term trends in major economic and demographic variables may be analyzed in terms of the implied pattern of industrial activity and the internal consistency of the resulting system.
2. Inter-regional model — A static input-output model based on 1966 data that represents interdependence among provinces and industries.
3. Energy model — An extension of the input-output model which calculates energy requirements in physical terms and is useful for performing energy-intensity and net-energy calculation.

System of National Accounts (Current)

Gross National Product Division

This division is responsible for the preparation and dissemination of the quarterly, annual and historical national income and expenditure accounts which include national income, gross national product and gross national expenditure aggregates (in both current and constant dollars) for the four main sectors of the economy. The division is also involved in continuing developmental and analytical activities.

A federal-provincial agreement in May resulted in the division undertaking a research program aimed at estimating the provincial distribution of total Canadian gross domestic product. Problems of concepts, methodology and data sources are being reviewed jointly with provincial statistical agencies and representatives of other federal departments. Considerable progress was made in estimating the distribution of the main aggregates and preliminary results are expected in mid-1975.

An up-dated version of the national income and expenditure accounts reference document was completed and its translation was begun. It incorporates all changes in concepts, methodology and sources introduced into the Accounts since 1956 and will be available in the latter part of 1975.

Balance of Payments Division

This division's primary responsibilities are preparation, analysis and publication of statistics and reports concerning:

- (a) the balance of payments on capital and current account transactions between Canada and other countries, and movements in Canada's official monetary reserves, and;
- (b) Canada's international investment position including details of its external assets and liabilities.

Quarterly and annual reports of the Canadian balance of international payments, and monthly reports on security transactions with non-residents were published. A report on Canada's international investment position for the period 1968-70 was prepared and selected sections were released in advance form in *Statistics Canada Daily*. Also released was a projection of control ratios for 1974 for major segments of Canadian industry, based on known changes in control of major companies.

Among the special events during the year were a special survey on business service receipts and payments for 1973, development of monthly foreign trade statistics on a balance-of-payments basis, and provision of consultative assistance to the International Monetary Fund in the revision of its Balance of Payments Manual.

Industry Product Division

This division publishes monthly, quarterly and annual indexes of real domestic product for the economy as a whole and for a large number of individual industries. More than 120 production series are published each month including such aggregates as total goods, total services, agriculture, manufacturing, retail trade and transportation. More industrial detail is available on an annual basis.

During 1975 the annual supplement to the monthly report *Indexes of Real Domestic Product by Industry* was not prepared to convert the entire system to a 1971 weight and reference base. The rebased indexes will be published around the end of 1975 in a new annual report.

The division also publishes annual current-dollar value-added information for the goods-producing industries by province and territory. These data for the years 1926 to 1973 are contained in the *Survey of Production, 1973* released in July 1975.

Divisional staff continued research and development on real-output and productivity measures for the non-commercial industries as

well as a number of other service industries, particularly the finance and insurance industries.

Financial Flows and Multinational Enterprises

This division compiles, analyzes and disseminates three sets of economic statistics. The first relates to financial flows in Canada and is based on a system designed to integrate statistics on the financing of current production and to trace the flow of funds among various lending and borrowing sectors. The second covers estimates of international travel between Canada and all other countries, including the number and characteristics of travellers. The third involves improvement of the statistical base necessary for examining the structure and activities of multinational enterprises.

A revised historical series of financial flow accounts for the period 1962 to 1969 was released through CANSIM*. As part of a continuing program, descriptions of the sources and methods of the compilation of financial flow accounts for four sectors of the economy were published. Pilot surveys of international travellers were undertaken at Toronto's Malton airport and at major Ontario border-crossing points to test existing survey methods and alternative means of data collection.

The Multinational Enterprise Section, formed in mid-year, completed a study of integrated data requirements for empirical analysis and policy decisions relating to foreign ownership of Canadian firms. Because of user demand, work was concentrated on foreign-controlled concerns in Canada. A feasibility study on the construction of a statistical series on foreign takeovers in the Canadian economy was also undertaken.

Current Economic Analysis Division

This division carries out applied research in economic forecasting, econometrics and seasonal-adjustment techniques. It is also responsible for the development and management of CANSIM* (Canadian socio-economic information management system) and for publication of the *Canadian Statistical Review*.

The Seasonal Adjustment Unit of the General Time Series conducts problem-oriented analytical research and provides consultative services on seasonal-adjustment methods. A new technique for estimating unbiased forecast seasonal factors was developed for the labour force survey series using the X-11 and Box and Jenkins methods. The special mathematical test package developed during this fiscal year to analyze revisions in the seasonal factors was programmed for general use.

CANSIM grew from 50,000 to 97,000 series in the year and a telephone-terminal communications system was set up linking the data base to nine major Canadian cities. The

*CANSIM— See footnote, pg. 13

expanded data base and the telephone network resulted in increase use of CANSIM.

During the year CANSIM also started to implement CAIS (CANSIM Alphatext Interface System) which had been developed the previous year.

Three publications were produced with this system and three are in varying stages of production.

The Business Cycles Unit was formed during the year and three staff members recruited. A data base of about 350 monthly series was assembled and computer programs written for the design of time-series filters that would reduce the false-signal behaviour of economic indicators. Several experimental filters were designed and applied to a small set of indicators. The results are encouraging and confirm our initial approach to alleviating the false-signal problem.

A prototype econometric model of the Canadian economy is now operational and is being used in conjunction with the preparation of the quarterly national accounts. The disaggregation and improvement of this model is continuing.

*CANSIM is a computerized and continuously updated data base containing a wide range of socio-economic information which is available in printouts and machine readable form to governments, business, labour and the professions.

Household and Institutional Statistics

The Household and Institutional Statistics Field is responsible for providing a wide range of socio-economic information on the people of Canada, their activities, and the institutions that serve them. Data are published on births, deaths and marriages; employment and unemployment; personal income, assets and debts; consumer and governmental expenditures; education, crimes and the activities of police courts and correctional institutions; health and welfare.

One major thrust of the Field's program in 1974-75 was the implementation of a Treasury Board 'Rule-of-Ten' guideline designed to minimize survey duplication, reduce respondent burden, maximize the usefulness of survey results and otherwise co-ordinate federal survey activities.

Household Statistics Branch

In addition to its continuing responsibilities for both ongoing household surveys in the areas of employment, family income and expenditure and special household surveys, major activities were undertaken at the Branch level in two main areas: overall social statistics planning and contributions to important international and national programs.

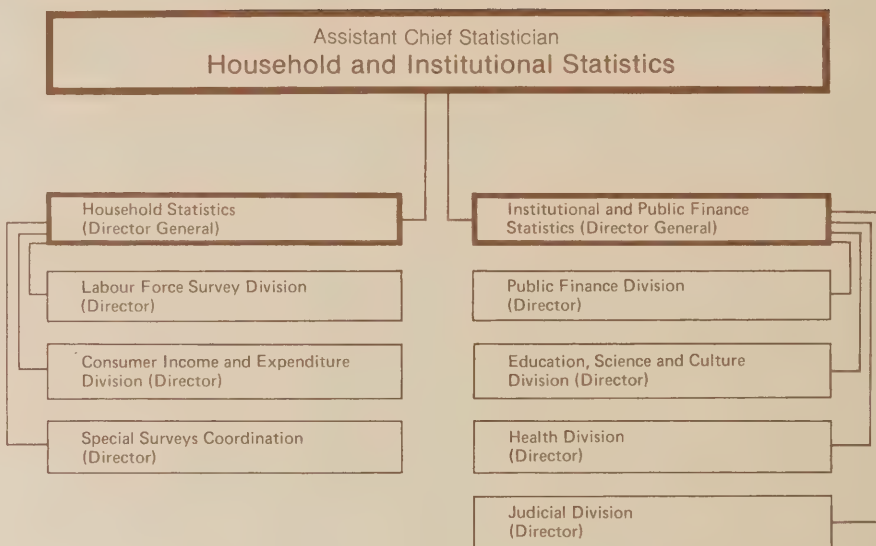
Staff were recruited to work on the development and integration of social statistics and social indicators, and priority was given to work on a plan for the improvement and extension of household surveys and for related activities such as the program of analytic research. Work commenced on the standardization of survey concepts.

Labour Force Survey Division

This Division conducts the monthly Labour Force Survey, and publishes a monthly and annual report on labour force participation, and produces employment and unemployment rates in a variety of cross-tabulations. In the monthly report, *The Labour Force* (71-001) three new data series were introduced: unemployment and unemployment rates by industry; unemployment and unemployment rates by occupation; and labour force by industry and by occupation.

In addition to the work being done on the current Labour Force Survey, the Division is engaged in a major project designed to revise and expand the Survey. The primary objective of the revision is to meet the demand for new and more-comprehensive labour-market data. The new areas of demand can be summarized in three general categories:

1. demand for new types of information to give a more complete picture of the complexities of the current labour-market situation,
2. demand for new information on the dynamic aspects of the labour force, and
3. demand for a larger sample to produce more-reliable data at the provincial and



sub-provincial level and more-detailed cross-classifications at all levels of aggregation.

The revised survey, scheduled for introduction in January 1976, incorporates a number of automated consistency and demographic edits (impossible in the current survey) that will lead to improved family data and more-reliable data. Results of specialized studies of concepts, content, survey techniques and quality control will be incorporated in the final operation of the new survey.

The Labour Force Survey sample redesign, undertaken after each decennial census to account for demographic changes, is nearing completion and the revised survey will be based on the new design and the 1971 census population projections.

Consumer Income and Expenditure Division

A number of developments took place in the three continuing household survey programs for which the Division is responsible.

A regular survey of household facilities and equipment was taken in April 1974, the annual report was published in the fall and sampling error estimates are now available. Data for 1967 to 1971 were revised in the light of 1971 census estimates.

From the Survey of Consumer Finances, regular reports describing the income distribution for 1972 were published (13-207 and 13-208) and a preliminary report of 1973 incomes based on data collected in 1974 was released. A new income series based on an income-after-tax concept was started. *Income After Tax, Distribution by Size in Canada, 1971*, (13-210) is the first report and it is hoped that after completion of development work such data will be available annually.

The Section responsible for family expenditure surveys published *Urban Family Expenditure, 1972* (62-541) based on a small sample in eight major metropolitan centres and in Whitehorse and Yellowknife.

Preliminary results of a food purchases survey of 14,000 families in 14 major centres conducted during the year, were published in the summer of 1975, and a complete budget recall survey of similar size and coverage conducted during January, February and March 1975, collected data on expenditure patterns during 1974.

In addition to these survey activities and the related publication program, the Division engaged in various research activities. *Income Estimates for Countries and Census Divisions, 1966 to 1969*, (13-204) was published but, due to resource problems, further work in small-area income estimates was suspended.

Preparatory work proceeded for the project analyzing changes in income distribution using 1961 and 1971 census data. Special analysis of survey data, particularly the asset and debt data collected in the Survey of Consumer Finances 1970, was continued and *Survey of Consumer Finances 1970, Selected Reports, Volume I* (13-550) was published. Volume II is in preparation.

In data dissemination, the release of carefully edited tape based on data collected in the Survey of Consumer Finances, 1972, launched a new program of supplying micro data tapes for public use. Precautions were taken to protect the anonymity of the survey's reporting units. Similar tapes will be made available every second year when the Survey of Consumer Finances has a larger sample, and public-use tapes will be issued from the linked data of the Survey of Consumer Finances and the Household Facilities and Equipment Survey.

The data-dissemination unit provided special data and services to federal and provincial departments including Health and

Welfare Canada for the social security review.

**Special Surveys
Coordination Division**

This Division is responsible for the management of new and ad hoc household surveys, the administration of the Treasury Board's "ten-respondent" directive, which requires all federal surveys to be reported to Statistics Canada, and has been designated as the focal point within Statistics Canada for all special survey work requested by outside agencies. The particular structure of these activities is new, inasmuch as the ten-respondent circular has been extensively revised, and the survey management and assistance capability represents a consolidation of responsibilities previously spread among several divisions.

The main development in 1974-75 in co-ordinating surveys outside Statistics Canada was the issuing of the Treasury Board *Guidelines for Requests for Information from More Than Ten Respondents* (Circular No. 1974-162). A large increase in the number of submissions were made under the Directive following consultations and subsequent revision. A number of professionals were added to the staff during 1974-75 to cope with the increased workload and a newsletter was published containing abstracts of all submissions made according to the Guidelines — the first issue, entitled "New Surveys", was released in the spring of 1975.

The Division managed 15 special surveys during 1974-75 on such topics as: the smoking habits of Canadians, summer work experience of students, the travel patterns of Canadians; and the retirement and pre-retirement characteristics of persons over 55 years of age.

The largest survey managed by the Division during 1974-75 was a survey of housing units sponsored by the Central Mortgage and Housing Corporation. The survey fieldwork was conducted during October and November 1974 and involved some 75,000 household interviews in 23 cities.

**Institutions and
Public Finance
Branch**

This Branch provides information on the institutions of Canadian society and the individuals with whom they are concerned. It has continued to expand the range of information produced and the services available and has continued work on the consolidation of social security information based upon the administrative records of the federal and provincial government departments concerned.

Public Finance Division

The activities of the Public Finance Division were mainly restricted to the maintenance of measuring the income and expenditures of federal, provincial and local governments and the further development of projects initiated earlier.

Highlights of the Division's activities for this fiscal year include:

The first issue of *Government Finance in Accordance with the System of National Accounts* (68-001), released in March 1975, presents revenue and expenditure detail for all subsectors of the government sector by quarters for years 1970 to 1973. Its purpose is to facilitate current analysis of the government sector, and in 1975-76 it will become a quarterly.

Planning and initial development was undertaken on the revision and restructuring of past government financial management statistical series with the objective of producing historically consistent revenue and expenditure data for each level of government.

Technical assistance was provided to the Tri-Level Task Force on Public Finance and one senior divisional official was seconded to the Task Force to direct its compilation of financial data on all levels of government.

Progress was made in establishing the Perpetual Inventory of Local Government Debt project, after funds were provided. Initial outputs are planned for late 1975-76.

The quarterly survey of municipal financial assets was expanded to a base of over 200 municipalities in an effort to improve the quality of the Quarterly Financial Flow accounts estimates.

Progress was made toward the identification of all local government entities or centres in Canada. A publication on this subject is anticipated in 1975-76.

**Education, Science and
Culture Division**

During 1974-75, the Division responded to demands for statistical information that reflected new problems and challenges facing public and private authorities in the fields of education, science and culture. The program of publications and data output was modified to insure a continuing adaptation to the changing needs of policy-makers.

The needs for education statistics now relate to problems of resource use. Changes in student-body growth rates, motivation and employment prospects necessitated a re-orientation of the Division's activities to reflect the growing importance of statistical information on individuals as opposed to institutions, on management as opposed to indicators of growth and on scientific activities and culture.

New surveys were initiated in those areas where needs were most critical and an integrated plan for the future development of cultural statistics was formulated.

During the year, some 40 publications were released by the Division, and in September 1974, the Council of Ministers of Education and Statistics Canada's Minister reached agreement on the contents and orientation of the Division's program of education statistics. The agreement recognized the role of the Division at the national level.

During the year the Division also prepared a position paper outlining concepts and definitions for development of statistics on adult education; planned a survey of characteristics, aspirations and financial situation of students attending postsecondary institutions across Canada; continued development of the University Student Information System; designed a salary analysis package of full-time teaching staffs in Canadian universities; completed a survey on the aspirations of senior high-school students in five provinces; completed a review of the elements of elementary-secondary teacher statistics considered essential for national statistical purposes; and prepared provincial reports to guide educational authorities in a systematic exploitation of data collected through the 1971 census.

The Division's program of cultural statistics underwent significant developments throughout the year 1974-75. A conceptual framework for the measurement of cultural activities, including travel, tourism and recreation was established. Through the support of the Department of the Secretary of State, a joint program of cultural statistics was implemented. For the first time, a survey of book publishing in Canada was carried out and the existing surveys of performing arts and museums were expanded and adapted to serve the policy needs of federal and provincial governments. In October 1974, a comprehensive survey of travel habits and patterns of Canadians was undertaken on behalf of the Canadian Government Office of Tourism.

Activities in the area of science statistics resulted in the publication of results on two experienced surveys of technological innovation and the first survey of scientific expenditures of private non-profit organizations conducted since 1965.

Pilot surveys of provincial government scientific activities in Alberta, Nova Scotia and Ontario were successfully completed.

An agreement was reached with the Ministry of State for Science and Technology to eliminate duplication of requests for information on science activities of federal government departments. One main survey will be conducted annually by Statistics Canada in the fall, supplemented by a program forecast inquiry conducted by the Ministry.

**Health
Division**

The main objective of the Division is to provide information on the health and health care of Canadians but the information produced is used for demographic studies, product marketing research, and other uses.

Provincial governments and institutions or organizations under the jurisdiction of provincial governments are the main sources of statistical information. To supplement the liaison activities already in existence, a Federal-Provincial Working Party on Health Statistics has been established, its first meeting being convened in February 1975.

The Vital Statistics Section publishes a series of annual reports on vital statistics, produces detailed tabulations for provincial use, and provides secretariat services for the Vital Statistics Council for Canada.

The Mental Health Section produces and analyzes statistics on patients admitted to and separated from Canadian psychiatric inpatient facilities. During the year the Division published two annual reports with detailed tabulations on admissions, separations and patients on books of institutions; published a preliminary report outlining patient movement in 1974; implemented a new program for the collection of psychiatric outpatient statistics; provided special tabulations for researchers in federal and provincial government departments, universities and hospitals; and through a contract with the Canadian Mental Health Association, commenced a research project on mental health statistics.

The Epidemiology Section produced two new annual publications: *Canadian Dialysis Register, Summary of Patients on Dialysis During 1973*, and *Canadian Dialysis Register Follow-up of Patients on Dialysis During 1973*.

Special tabulations produced by the Section include standardized incidence rates, and actual and expected cases of cancer by provinces, sex, and diagnosis. Special projects undertaken by the Section include computerized systems to monitor cancer incidence by geographic area providing both a summary of significant peaks of cancer incidence and detailed cross-tabulations relating to the significant items.

The Primary Care Section is responsible for illnesses suffered and medical treatment given outside hospitals. With the help and co-operation of two provinces, the Section is processing individual claim data and establishing norms for sampling these records for special studies and for ad hoc retrieval. The Section is also aggregating information for samples of these abstracts to provide information on the course of illness and the effect of health treatment over time.

Work progressed on a report on Saskatchewan medicare data for the year 1971 which show for the first time the kind of medical services, by age and sex of discrete patients within diagnostic groups.

The Hospital Morbidity Section is responsible for hospital inpatient statistics and therapeutic abortion statistics. Three volumes of hospital inpatient statistics are published annually, two diagnosis and one by surgical operation performed.

For the period August 1969 to December 1973, the Section released eight reports on therapeutic abortions, the quality and coverage of which has been improved by incorporation of additional information on allied subjects.

The Hospitals Section produces, analyzes and publishes data on Canadian hospitals. Publications on annual hospital statistics were consolidated for 1973 into three reports.

In 1974, two special surveys were conducted in conjunction with Health and Welfare Canada: Survey of Blood Transfusion Laboratory (Blood Bank), and Emergency Services Study.

In 1975, the survey of inpatient facilities for the treatment of emotionally disturbed children was undertaken.

The Special Care Facilities Section conducted an inventory survey, the first of its kind, relating to residential special care facilities in Canada, and undertook development of a system to collect data on the services delivered by the Victorian Order of Nurses and the characteristics of their patients.

The Health Manpower Section collects and disseminates demographic and economic characteristics of health personnel in Canada. The following groups are included in the currently operational surveys: registered nurses, physiotherapists, occupational therapists, radiological technicians, and physicians and surgeons. Development work for a survey of dental hygienists has been completed and the survey is scheduled to commence in the next fiscal year.

The Health Economics Unit was formed in September 1974 to perform in-depth studies on all aspects of the economics of health and medical care in Canada.

During the year, the unit worked with Health and Welfare Canada in such areas as the review of existing health expenditure statistics and methodology, physicians' and dentists' incomes data, and urban-rural distribution of health manpower, in order to improve present data sources.

Studies of medical manpower and health expenditure will be published next year.

Judicial Division

A number of new activities were undertaken this year to expand upon the Division's ongoing program of providing information in the judicial process, law enforcement and rehabilitative services.

A satellite of Statistics Canada was started within the Ministry of the Solicitor General to service the statistical needs of both departments and of the RCMP, the Canadian Penitentiary Service and the Canadian Parole Board. The satellite operates from the Ministry's Sparks Street offices in Ottawa.

A June federal/provincial conference resulted in the creation of a permanent federal/provincial advisory committee on judicial information and statistics and the creation of task forces to deal with matters such as future data generation and common definitions in criminal justice. Statistics Canada involvement includes providing secretariat resources and active participation in task forces.

A research and analysis section was created whose responsibilities include increasing analytical content of existing programs and publications, initiating new publications, fostering better use of existing data and initiating new programs which will integrate

and strengthen justice statistics in Canada.

A Bail Reform Act study initiated in 1973-74 on behalf of the Department of Justice was completed in July 1974. Findings were made available to provincial attorneys general by that Department in 1974.

A national survey of civil litigation and court processes obtained data from a sampling of randomly selected 1971 cases initiated in civil courts of all levels in major cities of nine Canadian provinces and the two territories. Preliminary findings will be available late in 1975.

A Motor Vehicle Theft survey, conducted with the co-operation of the Canadian Association of Chiefs of Police, covered conditions surrounding all motor vehicle thefts reported to Canadian police during September and October 1974. Findings were published in June 1975.

Implementation of plans developed in 1973-74 to improve and expand correctional statistics progressed in 1974-75 with the development of a detailed information system on adults in provincial correctional institutions. This system was fully implemented in the Maritime Provinces. Work has also progressed toward establishment of a similar probation program. Concurrently, an interdepartmental project team has been formed to upgrade the federal penitentiary statistics program.

Statistical Services

This field supports data-collection and compilation operations, including survey methodology, field survey work and data processing.

Household Surveys Development Staff

This Division has four main functions and areas of methodological responsibility.

Methodological Research and Development is responsible for conducting research in the area of response errors and analysis of survey data with specific reference to the Labour Force Survey, and provides methodological services, such as sample design, estimation, and control, for a number of on-going household surveys. Also, it provides for the methodological requirements for Labour Force Survey, Consumer Income and Expenditure, and Financial Flows and Multinational Enterprises divisions.

In conjunction with Personnel Administration (Staff Development and Training), the sub-division has organized six courses, all of them given by members of the Household Surveys Development Division. These courses are intended for selected members of the professional staff of Statistics Canada and include: theory of sampling, advanced sampling, special topic sampling, statistical methods, introduction to econometrics, and operations research.

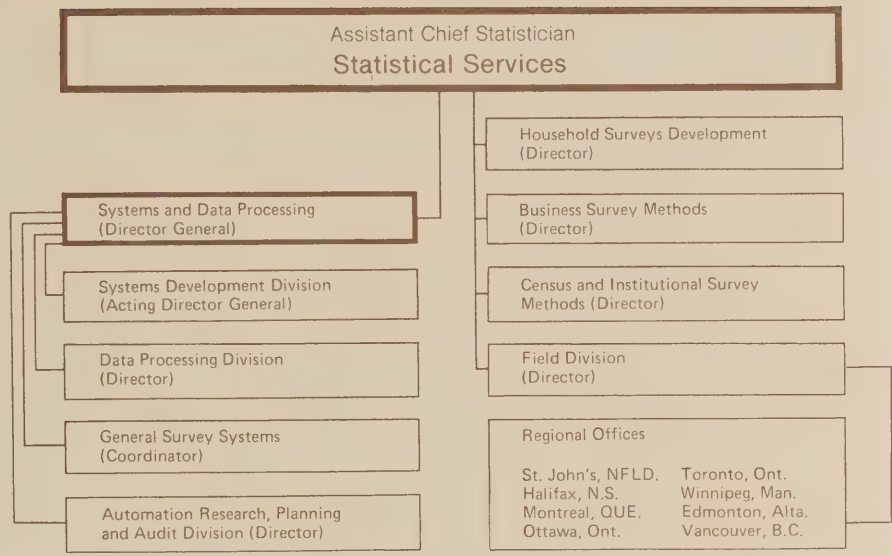
Data Collection Methodology focuses on sampling and data collection development, and control and evaluation of the most directly applied type. It works closely with Field Division on a day-to-day basis providing that division with statistical and technical services. Close liaison is also maintained with the Labour Force Survey Division particularly in relation to data quality and the effect of data collection procedures on estimates.

Examples of some activities of this sub-division are:

- a) The Quality Assurance Program, which is designed to monitor the various performance measures related to design and analysis, as well as to field operations. It includes the monitoring of slippage, stratification indices, various biases, non-response, enumeration cost, interviewer performance standards, etc;
- b) Sample Control and Development which is responsible for most of the area sampling in the bureau, setting up sample frames, preparing sampling material for the field, identifying and defining sampling units, and assisting in the development and control of listing and counting;
- c) Experimental work which involves searching for and testing new ways of interviewing and other field procedures.

Special Surveys and the Rule of Ten

This sub-division is responsible for methodological development of special surveys co-ordinated by Special Surveys Co-ordination Division. It provides statistical services to federal departments and methodological services in the



administration of the Rule-of-Ten directives. Most of the services provided by this sub-division are cost-recoverable. Examples of some of the major activities of this sub-division are: CMHC Survey of Housing Units 1974 and 1975, supplementary surveys which are conducted monthly in conjunction with the Labour Force Survey, Selected Leisure Activities, Survey of Working Poor, CMHC Housing Starts and Completions Survey, and Survey of Immigrants.

With relation to the Rule-of-Ten directive (Treasury Board Circular 1974 — 162, Guidelines for Requests for Information from More than Ten Respondents), the sub-division is a methodological focal point within Statistics Canada for the implementation of this circular. The main objectives are to improve the technical quality of surveys undertaken by federal departments, to avoid duplication of effort and to minimize response burden. This sub-division also carries out developmental work in conjunction with other divisions on general survey design systems.

In addition to the three main activities described above, there is a group within the Division whose main function is to carry out methodological research and consultation services to others in the field of mathematical statistics and survey research. This group is also responsible for the monthly production of co-efficients of variations for many Labour Force Survey characteristics and for standard deviations of changes from one month and from one year on request. Furthermore, it co-ordinates and develops new advancements in the theory of survey designs.

Finally, in dissemination of information on methodology, the Division holds a series of seminars on topics of general interest and it has developed a series of technical memoranda and a journal, *Survey Methodology*.

Business Survey Methods Division

The BSM Division is responsible for survey methodological services and, in some cases, systems design and development of surveys conducted by the Business Statistics Field. Its services are available to other divisions in Statistics Canada and certain outside agencies which are concerned with business statistics.

For Business Register and Profiling Division, the BSM Division carried out further refinements to the Business Register, reconciled various lists against the Register, began development of a data-base maintenance system for the Register to replace the tape system, completed standardized systems and procedures (other than computer systems) for business profiling for any class of information, and specified and selected a sample of unincorporated taxfilers (T1 returns), with or without employees. The incorporated sector of the register was matched against the T2 file of corporate tax returns from Revenue Canada.

In Merchandising and Services, the Division provided technical assistance and consultation on methodology and systems for the Retail Trade Survey, continued development of the Retail Commodity Survey, prepared a sample design and estimation procedure for the Charitable Organizations Survey, and developed a methodological and systems test for the 1981 Census of Merchandising and Services.

In Transportation and Communications Division, the BSM Division made substantial revisions to the strategy and scope of the For-hire Trucking Origin and Destination Survey.

During the year the Division began an assessment of the feasibility of developing a generalized system for the Construction Division's censuses and matched and reconciled that division's list with the Business Register.

For Labour Division the BSM Division prepared the 1973 Statistical Report to collect employment and earnings data from the education, health, welfare, government and small employer sectors and employment data from the large employer sector. It designed the 1975 Survey of Employers which was mainly based on improvements from the 1973 Benchmark Survey, introduced a single rotating sample for employment survey ES2 and the small-units sector of the Job Vacancy Survey, modified the tabulation sub-system in ES1, and redesigned the sample in the large business sector of the Job Vacancy Survey and the tabulation phases of the Occupational Employment Survey.

The Division continued monitoring and evaluating the annual (T2) survey for Business Finance Division, undertook the measurement of the quality of certain Revenue Canada data characteristics, and continued development of a sophisticated system for delineating inter-corporate ownership complexes and calculating non-resident ownership and control.

The division assisted in two programs for the Department of Finance on a cost-recoverable basis: the Capital Cost Allowance Survey was conducted by the Division and the second round of the methodology of the Tax Measures Review Survey was largely controlled by the division.

The Labour Division Master File (DMF) was constructed during 1974 from the Business Register, ES1 and Job Vacancy Survey files. The Occupational Employment Survey and ES2 both started to use the DMF in 1975, and discussions were held with several other divisions on the introduction of master files operated under the Business Register's numbering system.

Census and Institutional Survey Methods Division

This Division provides methodological services, including survey design and evaluation to Census Field, Agriculture Division, divisions of the Institutional and Public Finance Statistics Branch, and Data Processing Division; provides consultative services on methodology to these divisions, to Census Field and outside users; and conducts research on the measurement of response errors and on weighting methods.

The Division was involved in two remaining evaluation projects from Census 71: the reverse record check which estimates undercoverage and provides an analysis of missed persons, and the response variance study which provides measures of reliability of Census estimates.

In preparation for the 1976 Census, the Division evaluated results of the 1974 Test Census including the extension of quality control to cover additional duties of enumerators, the use of a sequential sampling plan in quality control, the quality of the microfilming operation, and the use of GEISHA* for tracing edit failures. It has been involved in the quality control of questionnaire printing, a motivation study of respondent reaction to

the Census and its publicity, a check on dwellings designated as vacant in the 1974 test, a test of alternate forms of questions, weighting procedures, and a pre-edit processing design to prepare the census file for GEISHA.

The Division formulated a program for measuring data quality for Census 76, developed several components of the program — coverage studies, a response-rate study, and a Labour Force Survey-Census match — and is studying other evaluation projects to ensure that the program meets its objectives.

The Division has been preparing for the 1981 Census by participating in the joint Census-Statistical Services committee responsible for development of a research and testing program for that operation.

For Agriculture Division, the re-design was completed for the Annual Enumerative Survey, the major survey to collect agriculture data based on a probability sample, whose results are used in setting Canadian and some provincial annual estimates. Other continuing work included the re-design and implementation of the Objective Yield surveys and of livestock surveys. For the latter, evaluation of the effects of using out-of-date list frames led to the development and use of methods to cope with the problem.

The Division was heavily involved in the planning, development and implementation of a national Special Care Survey designed to collect basic data on each facility (to be used also in the establishment of a continuously updated frame for other surveys); it participated in development of the Victoria Order of Nurses Survey; and provided consultative services for other Health Division surveys.

For Judicial Division, the CISM Division was involved in the planning and implementation of a Civil Statistics Survey, a project on which establishment of a continuing civil statistics program could be based, and of a survey of motor vehicle thefts.

The Division has been involved in five projects on a cost-recovery basis — the Bail Reform Act Survey, the Canada Health Survey, the Highly-qualified Manpower Survey, Post Secondary Student Survey and the Western Grains Stabilization Act Survey.

The Division provides a service to the bureau for the quality control of data capture of large surveys. The acquisition of optical character reader equipment (OCR) involved the Division in numerous projects converting to OCR from key-entry data capture. The processing of 8.8 million data records through the new equipment saved \$45,000. Conversions from processing on out-of-date direct data-capture equipment or from processing outside the bureau led to an additional saving of \$50,000. The remaining nine continuing key-entry projects in which samples are verified using one or more quality control plans instead of 100% verification resulted in a further saving of \$87,000.

Field Division

Field Division, the sole field collection agency of Statistics Canada, operates eight regional offices in the nation's principal cities.

The Division was heavily involved in the parallel run of the current and the Revised Labour Force Survey which began in January 1975. For the revised survey, the regional offices recruited and trained a new staff of interviewers and introduced a number of new techniques and new equipment. Mini computers permit data transmissions to Ottawa using telecommunications lines in computer useable form.

Since the 1971 Census, the Division has become responsible for developing detailed Census field procedures, training programs and logistical support for quinquennial, decennial and test censuses of Canada. Plans are now under way for the 1976 Census using the basic self-enumeration methodology introduced in 1971, and the procedural improvements which resulted from the 1974 Census Test of Population, Housing and Agriculture conducted in households and agricultural holdings in the Moose Jaw, North Bay and Trois-Rivières areas.

The first phase of a special survey on housing was completed. Interviews were carried out at 75,000 households by 500 interviewers over a two-month period.

During the year, the Division continued its programs in the areas of pricing, business reports and job vacancies.

Project "Doorstep Diplomacy" was launched as part of an on-going program to improve the awareness of interviewers of the value of good respondent relations. The entire program was produced and carried out in six weeks and the Special Projects Section is extending this program to all Divisional employees on all programs.

Systems and Data Processing Branch

This branch provides comprehensive electronic data processing (EDP) systems and production services to the data-gathering and information-disseminating divisions of Statistics Canada. Closely associated is an intensive and continuing research effort devoted to the development of general survey processing systems and components.

Data Administration Section

As a result of adding the inventory of disk resident data files to the data administration system the Section proposed a disk storage allocation and conservation scheme which will be implemented in 1975-76. A department-wide data-base user group was established and review of data-base design requirements and practices within the department is under way.

At year's end the system's acceptance function within Data Administration Section was

*GEISHA— See footnote, pg. 20

maintaining the operational integrity of some 150 departmental production systems and, in addition, was administering two large data-base systems — the 1971 Census of Population and the Data Administration System itself. The Section was also represented on the data security task force which published an EDP security report whose recommendations will be implemented in the next fiscal year.

A joint data documentation project with the Standards Division and the Marketing Services Field was established; the subject area is Manufacturing and Primary Industries division. The evaluation of the project strategy will be carried out in 1975-76 and if successful, a plan for documenting other divisions' data will be established.

The data dictionary system, a joint project with the General Survey System Division, was developed and implemented during the year. The data dictionary will define those data files in the bureau which will form the "corporate data base". The integrity of these data files will be maintained by validating them with the appropriate data dictionary definitions.

EDP Training Section

The EDP Training Section introduced 12 new training courses during 1974-75 and conducted a joint survey with Staff Training and Development on the bureau's EDP training needs compared with the existing calendar of courses.

The Section studies storage of training material and program documentation and recommended conversion of the material to a micrographic format. It undertook a series of seminars and briefing sessions aimed at informing Branch employees about new equipment and developments in the Branch.

Systems Development Division

The Division continued to stress the interdisciplinary team approach to systems development, and the integration of systems. This integration normally involves the replacement of several stand-alone systems by a single, more comprehensive one, using data-base technology, generalized approaches and re-useable components. These measures are taken to extend the useful life of the system, and to make it more flexible and responsive to wide-ranging demands. One such system, the Integrated Vital Statistics system, will replace about 15 stand-alone systems.

An example of another new approach is the Revised Labour Force Survey's use of mini-computers and data communications. Basic labour-force raw data are collected by the Department's regional office staff, validated by mini-computers and transmitted daily to the central computer facility in Ottawa. The feasibility of collecting data for other bureau surveys using this same approach is being studied.

The census project team, in developing the processing systems for the 1976 Census, has made use of new generalized system components which can be adapted to future censuses.

In addition, an on-line processing system was introduced and the production and marketing of anonymous one-per-cent sample files was begun.

During 1974-75, existing project control and planning systems were being tailored and integrated to meet the requirements of Treasury Board's EDP master plan.

Data Processing Division

This Division provides a wide variety of services, equipment and techniques to support the Department's data-processing requirements from simple calculation, analysis and data compilation using desk calculators/comptometers, to large and complex computerized systems which require data capture, auxiliary equipment, data control and scheduling, computer processing, binding and duplicating services.

The involvement of the calculating section in metric conversion has already begun for a number of surveys.

Data capture — the conversion of data from original source to machine-readable form — is accomplished by optical mark readers or optical character recognition (OCR) equipment, key punch/key verify machines, key-disk-tape equipment, and by a mini-computer network from data collected, processed and transmitted by the eight regional offices.

The major computer system is an IBM S/370-168 with three megabytes of memory, 5.2 billion bytes of disk storage and associated peripherals such as tape drives, printers, document reader and card readers. In addition, there is an in-house terminal network, consisting of over 150 typewriter/CRT and six RJE reader/printer terminals dispersed throughout user areas in the department for remote job-entry, program development, text editing, etc. The Computer Centre operated 17 shifts or 136 hours per week plus overtime when required. In addition, the Division administered the purchase by Statistics Canada of more than one million dollars worth of computer resources outside the department.

The Division provides a wide range of software and utilities support, and consultation services to over 500 computer users. Testing of the data capture and processing system for the 1976 Census was conducted using the FOSDIC computers and the micro-film cameras with automatic page-turning equipment. Tabulation of the 1971 census data for publication and data dissemination continued throughout the year.

Work performed during 1974-75 included:

Computer jobs processed — 548,411
Programs executed — 1,793,000
Lines printed — 972,377,000
Terminal hours used — 81,609
Magnetic tapes retained — 59,449
Records keyed in data capture — 20,927,311
Records verified in data capture — 15,584,124
Documents processed in calculating — 377,835

General Survey Systems Division

Development of a number of general systems was completed during the year and their applications produced interesting results.

The general system for editing and automatic imputation of qualitative data, CANEDIT (formerly GEISHA)* was applied on three projects including the 1974 test census of population. It proved to be reliable and enabled users to evaluate the results of editing and imputation to a degree previously unknown in other approaches. As a consequence some requirements for the improvement of certain algorithms were identified and implemented.

STATAPE**, a sequential tabulating system, was incorporated in a production system for external trade data and is now available for general use.

The general estimation system was completed and used in a survey processing application. It is now available for use in any sample survey processing system.

A general program for file generation in optical character recognition type and scan operation was written and used in a first application.

The first version of the General Survey Processing Systems (GSPS) with its components CANEDIT and STATPAK was applied in two household surveys for editing and tabulating data. While the projects were completed successfully some shortcomings were found in the data base management software on which the GSPS components are based. It was decided not to proceed further with other applications but first to improve on the data management component. Therefore the development of a data-base management system called RAPID (Relational Access Processor for Integrated Data) has been started to provide a DBMS which is suitable for most statistical data-processing systems in Statistics Canada.

RAPID, based on the relational data model, an integrated data dictionary, and a high-level data-base transformation language, uses the GSS developed and proven concept of stringfiles as the data-access technique. With this development GSS hopes to have a suitable DBMS ready when major systems in the bureau will go to data-base technology. It is also planned that future generalized programs will be based on RAPID as it will provide flexible data management whether data are stored on tape or disk.

Automation Research, Planning and Audit Division

The Division's activities during 1974-75 are described under headings corresponding to the

*GEISHA— See footnote, pg. 20

**STATAPE— See footnote, pg. 20

Division's three sections, and a miscellaneous group:

Research — Parts 1 and 3 of a three-part study of the bureau's word-processing operations, dealing with computer printing and text processing, respectively, were largely completed. Part 2, which covers alternative data output techniques, was initiated. An analysis of short-term requirements for terminals, requested by the Data Processing Division, was completed.

Planning — During the year the department's annual electronic data processing (EDP) report and plan for Treasury Board was prepared.

A detailed survey of the bureau's future EDP requirements was carried out and the results stored in machine-readable format. This information will form the core of a data base which will be used to prepare EDP reports and forecasts of future EDP requirements.

Work continued on development of an EDP strategic plan for the Branch.

Audit — Since the position of chief of the Section was filled late in the year, no formal audit work was carried out. However, the Section participated in the work of the departmental EDP Security Committee and in evaluating proposals to acquire hardware.

Other — Division staff participated in a number of Branch programs such as the chairing of task forces on service-level policy and disk-space management.

Because of a shortage of support staff throughout the Branch the Division provided help in establishing the IBM 1288 reader, the Xerox 1200 page printer, and photo-composition services.

On occasion, the Division has been called upon to help subject-matter divisions prepare submissions for minor items of EDP equipment such as terminals and small optical readers.

*GEISHA— (now renamed CANEDIT) a general program system for editing and automatically imputing census questionnaire responses before tabulation and publication.

**STATAPE— a general tabulation system which accepts data stored on magnetic tape or disc.

Marketing Services

This field promotes general awareness of the bureau and its program and encourages the use of statistical information.

Information Services Division

This Division provides information on departmental programs and services, and public relations programs in support of departmental objectives.

In addition to the usual functions of providing information to journalists and information packages for departmental surveys, the Division implemented advertising, publicity and public relations plans for the May, 1974, test census and provided on-the-spot support in the three test centres: Trois-Rivières, North Bay and Moose Jaw.

The Division supervised the design and construction of a permanent display now installed in the north lobby of the R.H. Coats Building.

The Division was responsible for promotion of the 1974 Public Service United Way campaign.

The Division continued publication of the *Canada Year Book*, the handbook *Canada*, *Statistics Canada Daily* and *Infomat* for the general public; and *SCAN*, the department's employee magazine. Two employee-oriented special-purpose newsletters were published during the year — *On the Move*, providing information on the move to the new R.H. Coats Building, and *Action*, concerned with equal opportunities for women employees.

In co-operation with the Social Science Research Council, the Division began updating the *Historical Statistics of Canada* first published in 1965.

Work continued on the preparation of public relations support for the 1976 Census.

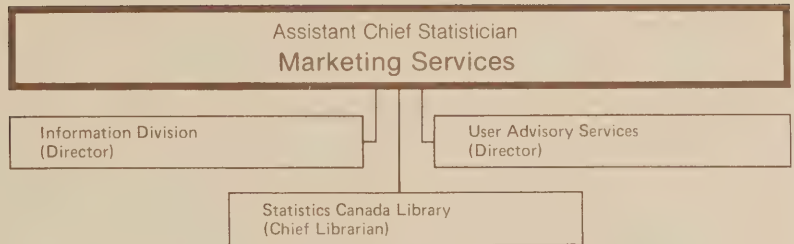
User Advisory Services Division

During 1974-75 User Advisory Services improved and extended its service to statistical users and intensified liaison with provincial government agencies.

Data Access and Use Section — This Section, which provides services to statistical users across Canada, strengthened its regional staff, installed computer terminals in a number of regional offices, and instituted a 24-hour automatic telephone-answering service in Ottawa with toll-free telephone lines from six major cities.

Regional staff visited all of Canada's public libraries with complete collections of Statistics Canada publications, visited well over 100 companies, and exhibited displays for the first time at the annual meetings of various user groups.

The Statistics Canada *Catalogue* was revised and published separately in English and French editions. Also, for the first time, the *Catalogue Supplement* was indexed.



Consultative Services Section — In co-operation with the bureau's legal adviser, the Division advised the Chief Statistician on the compatibility of provincial statistical legislation and the federal statistics act, provided specialized information and tabulations to provincial counterparts; completed the inventory of the bureau's statistical activities (surveys, programs, etc.); provided conference secretariat service to 36 committee meetings including one international meeting; and produced a report on the United Nations Interregional Seminar on Statistical Organization.

The publication, *Federal-Provincial Statistical News*, was released regularly through the year and a pamphlet containing selected statistics on provinces and territories was produced.

Analysis and Development Section — The Section completed several market research projects: an analysis of responses to the 1971 Canada Year Book Survey; the design and analysis of a questionnaire addressed to attendees of a user conference in Vancouver; and a summary of reactions to the Conference on Statistics for Corporate Decision-Making. A continuing program of analysis of the needs of subscribers to Statistics Canada publications was initiated.

A feedback system, designed to improve the flow of information on users and use of statistics from the regions to the departmental headquarters, became fully operational at the end of 1974 and, in the first quarter of 1975, development started on a clearing-house for statistical sources.

Statistics Canada Library

During 1974-75 progress was made in improving library service to Statistics Canada. In addition to handling a steadily increasing demand for reference service, for inter-library loan service and for loans of library materials, the staff has promoted the use of CAN/SDI (Selective Dissemination of Information), a computerized data base in the socio-economic disciplines.

A handbook was prepared to serve as a guide to the library, its resources and services, and in co-operation with Staff Development and Training, a monthly library orientation course was instituted.

In June 1974 the library moved to new quarters in the R.H. Coats building offering

improved facilities for users, more efficiency in work and service areas, and faster retrieval of library materials.

A project to recatalogue the collection has progressed with the completion in 1974-75 of all serial titles. For the first time a list of serials is available for users.

A project proposal for the automation of the technical services systems was approved and development will be completed in 1975-76

Census

Census Field is primarily responsible for the decennial and quinquennial censuses of population, housing and agriculture. In 1974-75, work continued on three censuses — 1971, 1976 and 1981. The first of a series of reports using 1971 census data from the linkage of the agriculture and population records was released, as was the first 1971 census analytical study. Twelve hundred custom-designed tabulations were produced from 1971 data, at users' requests.

Progress was made in the development of automated systems to improve processing of census data for 1976. Two tests, one held in May 1974 and the other in August 1974, helped finalize 1976 census procedures, questionnaires and instruction booklets. Planning started for tests leading to the 1981 census and proposals for a set of objectives for this census were developed.

Population Studies and Statistics Division

The primary responsibilities of the Population Studies and Statistics Division are (a) to help promote effective use of, and demand for, Statistics Canada's population statistics (portions of which emanate from four different Fields) by agencies and individuals outside Statistics Canada, and (b) to help promote the improvement of the Statistics Canada population statistics especially in areas that involve active co-operation among two or more Statistics Canada divisions.

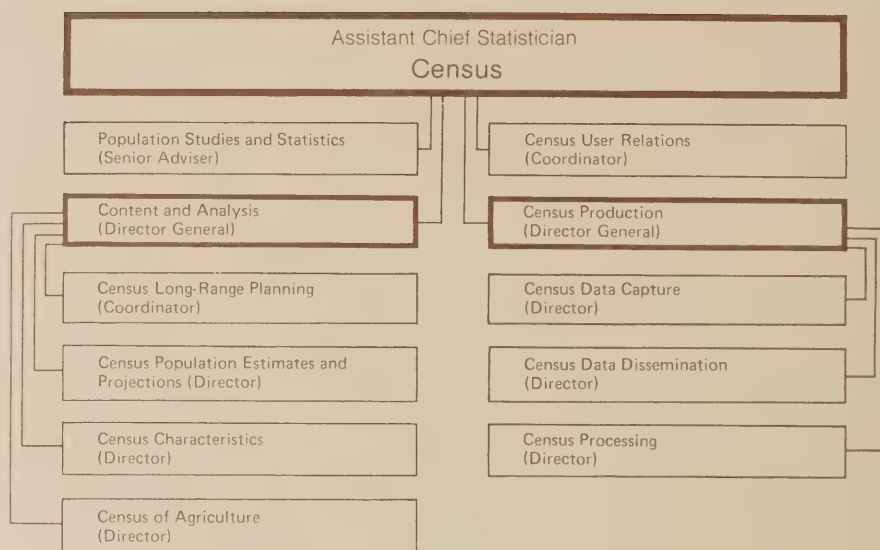
During 1974-75, the Division continued the planning and project management for the 1971 Census Analytical Studies Program. These studies form an important part of the dissemination of 1971 census data, providing syntheses of data on social and economic trends in Canada.

The first study, completed during the year, presents information on the mobility of important groups within the Canadian population and the relative importance of several demographic, social and economic determinants of this mobility with special emphasis on occupational and educational differences in mobility.

The Senior Adviser provided advice to several federal and provincial government departments and private agencies on the design and execution of research projects using Statistics Canada data, on the implications of recent and prospective trends in aspects of the population of Canada, and on the meaning and uses of Statistics Canada and related demographic data.

The Division edited and managed the production of a special volume of articles on the population of Canada commissioned for the World Population Conference by the United Nations, produced two chapters and assisted in the editing of the first issue of *Perspective Canada*, and has begun work on a chapter for the second issue.

The Senior Adviser represented Statistics Canada in the joint participation of this agency with Health and Welfare Canada concerning the



forthcoming first national fertility survey. Also, the Division co-operated with the C.D. Howe Institute on a monograph concerning the status of women for the International Women's Year celebrations.

User Relations

The Census User Relations Group has undertaken various projects in continued support of Statistics Canada policy of becoming more responsive to the needs of its major clients and to improve public awareness of the census product.

Publication of a newsletter, *Communiqué*, began in September 1974 which provides almost 400 Statistics Canada clients — federal and provincial government departments, universities, private researchers and other subscribers — with information on publications, research papers, release dates and general news items.

The group co-ordinated two meetings of the federal/provincial committee on the censuses of population, housing and agriculture, and three joint federal/provincial task forces, out of which detailed agreements were reached on the nature of provincial participation in census plans and the needs of provincial users. Besides *Communiqué*, status reports of census activities have been sent regularly to improve communication between Census Field and the provincial government departments.

Working closely with the Information Division, the User Relations Group played an important role in recommending the selection of the advertising agencies for the 1976 Census Publicity Program. After evaluating the results of the publicity program for the 1971 census and the May 1974 test census, the Group is now co-ordinating and supervising all aspects of the 1976 Census Publicity Program.

Content and Analysis Branch

Census Long-Range Planning Group

One of the major activities for the year was a detailed marketing analysis of the 1971 census. The information was gathered through personal interviews with representatives of federal government departments and agencies, provinces, territories, major Canadian municipalities, and actual and potential census-data users in the private sector. Additional information was obtained through a critical examination of the census product development, packaging, distribution and communications.

Several aspects of the census were examined in detail: legal constraints, census organization and processes, technological capabilities, existing and latent personnel skills available in Census Field, and strategic planning and its application to censuses.

The group developed proposals for a set of objectives for the 1981 census which will be considered by Statistics Canada management.

Census Population Estimates and Projections Division

The Division is responsible for the development of current population estimates and projections for Canada, provinces and territories, for metropolitan areas, census divisions and counties. During 1974-75, particular emphasis was placed on developmental work to further improve the quality of demographic estimates and projections and enhance their relevance to social and economic planning.

The Division published eight bulletins containing estimates of size, age-sex structure, marital status and family composition of the

Canadian population, including a publication on number of persons receiving Canadian citizenship status, and special population estimates for the administration of various cost-sharing programs involving the distribution of some five billion dollars. In addition, input was made to Manpower and Immigration's "Green Paper on Immigration and Population".

In research, the Division proceeded with development of a data base and methodology for estimating internal migration from such administrative records as medicare and income tax files, and of emigration from Canada by collaborating with relevant agencies of foreign nations and the United Nations. A long-term developmental project aimed at revising existing methodology of estimation was initiated.

Following the publication of *Population Projections for Canada and the Provinces 1972-2001* in June 1974, many requests were made by government departments for special population projections and simulations using the Statistics Canada Projection model. Detailed methodology and analysis of mortality, fertility and migration is provided in a *Technical Report on Population Projections for Canada and the Provinces, 1972-2001*, issued during the year.

Using the newly developed *Household and Family Projections Model*, the first set of household and family projections for Canada and the provinces to the year 2001 is in preparation.

Using actuarial techniques and the 1971 census results, the Division also carried out, jointly with Census Characteristics Division, a study, *Working Life Tables for Males in Canada and Provinces, 1971*.

Census Characteristics Division

The Characteristics Division is primarily responsible for the subject-matter development, evaluation, and interpretation of the population and housing censuses.

The Division's major efforts were the production of 1971 census material and acceleration of developmental work for Census 1976.

The year's achievements included:

- Completion of specification and validation of reports included in the publication program for Census 71. This work is essentially completed for Volumes I-III.
- Completion of eight profile studies in draft form (one language) and partial completion of another six.
- Commencement of a series of evaluation projects of 1971 data, including in-depth assessment of marital status, age, sex, age at first marriage, fertility, and language data. The dwelling-type evaluation was among those completed.
- Production of data reports for each federal electoral district and analysis of data from the Highly Qualified Manpower Survey.
- Participation in preparation of the 1971

Working Life Tables report, and continuation of work on the Place of Work project.

- Contribution to several bureau and external data publications and special tabulations to a wide range of public and private agencies.
- Development of a series of public use sample tapes for release during 1975.

For 1976 census planning, the Division contributed to the design of an automated edit and imputation system for data processing, finalized census questionnaires and instruction booklets and specifications for the publishing program, and reviewed procedures and manuals.

Census tracts were finalized and some 200 users and potential users of this information were surveyed on the adequacy of data produced. A test census was conducted in August 1974, to test respondents' comprehension of new questions on education and labour-force participation.

For the 1981 Census, initial content planning for upcoming subject-matter tests was undertaken.

During the year, professional staff of the Division contributed papers to bureau publications, external journals, and meetings of professional societies.

Census of Agriculture Division

The content and format of the 1976 Census of Agriculture questionnaires were finalized and preparation of field and office processing procedures and manuals was completed.

Research activities included further work on conceptual issues including new classifications for census-farms. Drafts of three analytical reports were completed and work progressed on a monograph on rural population.

The Census of Agriculture User Services Section provided users with an average of 40 special tabulations a month from the agriculture STATPAK data base.

The first reports using data obtained from the linkage of population and agriculture records were released and progress was made in the retrieval of data for the remaining reports in this series.

Planning for the 1981 census was started and a number of projects to determine the feasibility of using a mail-out/mail-back system were undertaken.

Production Branch

Data Capture Division

Data Capture Division was deeply involved in co-ordinating the field and regional processing activities and in planning and implementing the head office processing of the 1974 census test.

The Division also planned and co-ordinated a test of three reworded questions in August 1974.

The Division comprised four sections — Spatial Organization, Data Capture Applications and Development, Planning and Management Systems Development, and Evaluation.

The Planning and Management Systems Development Section co-ordinated the over-all planning for the 1974 test and planned the transitional period between the 1974 census test and the 1976 census, as part of the development of the census master tactical plan.

The Data Capture Applications and Development Section finalized the regional and head office processing training and procedures packages for the 1974 census test, carried out the processing phase and revised the procedural methodology for the 1976 census. The section also designed the census questionnaires and instruction booklets for the 1974 census tests and the 1976 census.

The Evaluation Section completed the evaluation of the 1974 census test, established the approach for evaluation of the 1976 census, devoted resources to analyzing and reporting on specific aspects of census methodology, and prepared a special evaluation report on the Highly Qualified Manpower Survey.

The Spatial Organization Section provided spatial delineation of geostatistical areas for all of Canada, analyzed field-checked maps and input this to the 1976 enumeration area map preparation and prepared maps designed to highlight population distribution and characteristics for the 1971 census publication program.

Data Dissemination Division

The Data Dissemination Division is responsible for providing the census information to a variety of users with interests in many fields of social and economic activity.

In fiscal year 1974-75, the Division received approximately 4,000 mailed requests (excluding orders for publications) a slight decrease from the previous year, and 20,000 telephone contacts, up significantly from the previous year. Over 1,200 custom-designed tabulations for non-standard areas or for distributions of characteristics not included in the regular tabulation program were produced at cost to the user. Production of these special tables made use of the GRDSR* (Geographically Referenced Data Storage and Retrieval) system and, in about five per cent of the cases, used the special geocoding features for defining special areas.

About 600 reels of census data on magnetic tapes were supplied to users with computer facilities. During the year, COM (Computer Output on Microfilm) facilities for production and distribution of census tabulations were introduced and 1,500 rolls of microfilm (equivalent to three million pages of output) were supplied.

Activity continued in the development and implementation of indexes and a directory of

*GRDSR— See footnote, pg. 24

tabulations reflecting the data content of the 1971 census. During the year, considerable progress was made in the assembly and organization of historical census material and internal documents of archival value for micro-filming.

The Census Pension Searches Unit, received and processed approximately 29,000 applications for proof of age and for birthplace.

Members of the division participated in several federal/provincial task forces and in discussions with various groups of potential users and described the availability of census data and its applications.

Census Processing Division

The primary responsibilities of the Census Processing Division are:

- the management of automated systems services provided to Census Field by other Fields of Statistics Canada,
- the design and development of geostatistical systems,
- the processing of data through edit, imputation and retrieval stages to fulfill dissemination programs and special requests,
- the management of census data bases including scheduling, processing, monitoring and maintenance,
- the quality-assurance measures for automated systems and
- research preparatory to the introduction of new or improved automated systems for Census Field.

During the year, the Division began testing a new system with a built-in edit capability to produce the geomaster file for the 1976 census to replace the error-prone manual edits of 1971, testing a new edit and imputation system designed to improve the quality of statistically imputed data, and began work on improvements to the retrieval system for the 1976 pre-planned program and for special requests.

Problems encountered with the validation of the 1971 data base for the "long" census questionnaire and with the production of publications and user summary tapes delayed publication by six months.

Eight additional population centres across Canada were added to the geocoded base for a total of 24, and work on the remaining eight centres with populations in excess of 50,000 was in progress. Work also was started on the planning phase of the 1981 census.

*Geographically Referenced Data Storage and Retrieval system permits production of census information for a user-specified area rather than on a census tract basis.

vérfiées sur le terrain et utilisés les résultats dans la mise au point des cartes des secteurs du dénombrement pour 1976. Elle a dressé des statistiques de la population en vue du programme de publications du recensement de 1971.

La Section des applications et du développement de la saisie des données a mis le point final à la documentation relative à la formation et aux procédures en matière de dépouillement aux bureaux régionaux et au bureau central, en vue du recensement d'essai de 1974, de plus, elle s'est occupée de la phase du dépouillement et a révisé la méthodologie pour le recensement de 1976. Enfin, elle a conçu les questionnaires et les livrets d'instructions pour le recensement de 1976, accordé des ressources pécuniaires de 1976, aborder l'évaluation du recensement de 1974, établir la façon d'aborder l'évaluation du recensement de 1976, accordé des ressources pécuniaires pour l'analyse et la présentation d'aspects particuliers de la méthodologie du recensement, et rédigé un rapport d'évaluation spécial concernant l'enquête sur la main-d'œuvre hautement qualifiée.

Division de la diffusion des données

La Division de la diffusion des données est chargée de communiquer les résultats du recensement aux divers utilisateurs qui s'intéressent à de nombreux secteurs d'activité économique et sociale.

Pendant l'année financière 1974-75, la division a reçu environ 4,000 demandes écrites (sauf les commandes de publications), ce qui représente une légère baisse par rapport à l'année précédente, et 20,000 appels téléphoniques, ce qui représente une nette augmentation. Plus de 1,200 totalisations effectuées sur commande, portant sur des secteurs non normaux, ont été produites à coûts payés par l'utilisateur. Pour produire ces tableaux spéciaux, on a eu recours au GDRS* (système de stockage et d'extraction des données codées selon une grille géographique) et, dans environ cinq pour cent des cas, aux caractéristiques spéciales du géocodage afin de définir des secteurs particuliers.

Environ 600 bobines de données du recensement enregistrées sur bandes magnétiques ont été fournies aux utilisateurs dotés d'installations électroniques. Au cours de l'année, les installations DIM (données informatiques sur microfilm) ont commencé à produire et distribuer des totalisations du recensement et

Division de l'exploitation

Les principales fonctions de la Division de l'exploitation du recensement sont :

- la gestion des services de systèmes automatisés fournis au Secteur du recensement par d'autres secteurs de Statistique Canada;
- la conception et la mise au point de systèmes géostatistiques;
- le traitement des données au moyen des phases de la vérification, de l'imputation et de l'extraction pour répondre aux programmes de diffusion et aux demandes spéciales;
- la gestion des bases de données du recensement, ce qui comprend entre autres l'ordonnement, le traitement, le contrôle et le maintien;
- les mesures d'assurance-qualité relativement aux systèmes automatisés; et
- les recherches préparatoires à l'implantation de systèmes automatisés nouveaux ou perfectionnés à l'intention du Secteur du recensement.

Au cours de l'année, la division a fait l'essai d'un nouveau système à mécanisme interne de vérification afin de produire le fichier géocodé pour le recensement de 1976, en remplacement des vérifications manuelles de 1971 qui étaient souvent source d'erreurs. Elle a également fait l'essai d'un nouveau système de vérification et d'imputation destiné à améliorer la qualité des données statistiques imputées, et elle a commencé à améliorer le système d'extraction en vue du programme pré-planifié de 1976 et des demandes spéciales.

La division a subi un retard de six mois en raison des problèmes survenus lors de la validation de la base de données de 1971 relativement au long questionnaire du recensement, et dans la production de publications et de bandes sommaires destinées aux utilisateurs.

Huit centres de population au Canada ont été ajoutés à la base géocodée, portant le total

à 24. La division a aussi travaillé sur les huit autres centres comptant plus de 50,000 habitants. La planification du recensement de 1981 a également été amorcée.

* Le Système de stockage et d'extraction des données codées selon une grille géographique permet de produire des données du recensement pour un secteur défini par l'utilisateur au lieu d'un secteur de recensement.

manifestes et latentes du personnel au Secteur du recensement, et planification stratégique et son application aux recensements.

Le groupe a aussi formulé des propositions portant sur une série d'objectifs pour le recensement de 1981 qui sera étudiée par la direction de Statistique Canada.

Division des estimations et des projections démographiques

Cette division est chargée de l'élaboration des estimations et des projections démographiques courantes pour le Canada, les provinces et les territoires, les régions métropolitaines, les divisions du recensement et les comtés. Au cours de 1974-75, elle a accordé une importance particulière à l'amélioration de la qualité des estimations et des projections démographiques et à l'accroissement de leur pertinence aux fins de la planification économique et sociale.

La division a publié huit bulletins renfermant des estimations sur la taille, la structure par âge et par sexe, l'état matrimonial et la composition familiale de la population canadienne, y compris une publication sur le nombre de personnes qui ont obtenu la citoyenneté canadienne, et des estimations démographiques spéciales en vue de l'administration de divers programmes à frais partagés comportant la distribution de quelque cinq milliards de dollars. En outre, elle a apporté sa contribution au Livre vert du ministre de la Main-d'œuvre et de l'immigration intitulé *Étude sur l'immigration et les objectifs démographiques du Canada*.

Dans le domaine de la recherche, la division a poursuivi la mise au point d'une base de données et d'une méthodologie en vue d'estimer les migrations internes à partir de dossiers administratifs tels que les fichiers de l'assurance-maladie et ceux de l'impôt sur le revenu, et l'émigration en provenance du Canada en collaboration avec les organismes pertinents des pays étrangers et avec l'Organisation des Nations Unies. Un projet à long terme a été amorcé dont l'objet est de revoir la méthodologie existante.

À la suite de la parution en juin 1974 de la publication intitulée *Projections démographiques pour le Canada et les provinces, 1972-2001*, les ministères ont formulé de nombreuses demandes de projections et de simulations démographiques spéciales utilisant le modèle de projection de Statistique Canada. Une méthodologie et une analyse détaillées de la mortalité, de la fécondité et de la migration figurent dans une publication parue au cours de l'année. *Rapport technique sur les projections démographiques pour le Canada et les provinces, 1972-2001*.

La division prépare actuellement la première série de projections jusqu'à l'an 2001 sur les ménages et les familles pour le Canada et les provinces à l'aide d'un document élaboré récemment et intitulé *Modèle de projections des ménages et des familles*.

Par recours aux techniques actuarielles et aux résultats du recensement de 1971, la division a également effectué, de concert avec la Division des caractéristiques du recensement, une étude intitulée *Tables de vie active des hommes au Canada et dans les provinces, 1971*.

Division des caractéristiques du recensement

Cette division s'occupe principalement de la mise au point des matières spécialisées de l'évaluation, et de l'interprétation des recensements de la population et du logement.

Les efforts ont porté surtout sur la production de documents pour le recensement de 1971 et sur l'accélération des travaux préparatoires au recensement de 1976.

L'année 1974-75 a été marquée par les réalisations suivantes:

- achèvement de la spécification et de la validation des bulletins compris dans le programme de publications pour le recensement de 1971, ce travail étant essentiellement terminé dans le cas des volumes 1 à 11
- achèvement de la première version de huit études de profils (unilingues) et achèvement des tables de vie active de 1971 et continuation des travaux relatifs au projet concernant le lieu de travail
- contribution à la rédaction de plusieurs publications fondées sur les données de Statistique Canada et de l'extérieur, et à la réalisation de totalisations spéciales destinées à divers organismes des secteurs public et privé
- mise au point d'une série de bandes-échantillons à grande diffusion devant paraître en 1975.

Dans le cadre de la planification du recensement de 1976, la division a contribué à la conception d'un système automatisé de vérification et d'imputation en vue du traitement des données, finalisé les questionnaires du recensement, livrés d'instructions et les spécifications relatives au programme de publications, et révisé les procédures et manuels.

Les secteurs de recensement ont été finalisés et quelque 200 utilisateurs réels et possibles de l'information des données produites, quêtée sur la pertinence des données produites. Un recensement d'essai a été effectué en août 1974 afin de vérifier si les répondants comprennent les nouvelles questions sur l'éducation et sur l'activité.

En ce qui concerne le recensement de 1981,

la division a commencé à prévoir le contenu en vue des essais qui seront effectués prochaine-ment.

Au cours de l'année, le personnel spécialisé de la division a fourni la matière destinée aux publications de Statistique Canada, aux journaux externes et aux réunions de sociétés professionnelles.

Division du recensement de l'agriculture

La Division du recensement de l'agriculture a mis le point final au contenu et à la présentation des questionnaires du recensement de l'agriculture pour 1976, et terminé la rédaction des procédures et des manuels de dépouillement sur le terrain et au bureau central.

Les activités de recherche ont comporté d'autres travaux sur des questions conceptuelles, notamment les nouvelles classifications pour les fermes de recensement. On en a terminé avec la première version de trois rapports analytiques: un au monographique sur la population rurale a été préparée.

La Section des services aux utilisateurs du recensement de l'agriculture a fourni tous les mois aux utilisateurs une moyenne de 40 totalisations spéciales établies à partir de la base de données agricoles STAPAK.

Les premiers bulletins utilisant les données découlant du couplage des dossiers de la population et de l'agriculture ont été publiés et l'extraction des données pour les autres bulletins de cette série s'est poursuivie.

La planification a commencé en vue du recensement de 1981 et un certain nombre de projets visant à déterminer la possibilité d'utiliser un système d'envoi et de retour par la poste ont été mis en chantier.

Direction de la production du recensement

Division de la saisie des données

La Division de la saisie des données a travaillé intensément à la coordination des activités de dépouillement sur le terrain et aux bureaux régionaux, ainsi qu'à la planification et à la mise en oeuvre du dépouillement du recensement d'essai de 1974 au bureau central.

La division a également planifié et coordonné un essai portant sur trois questions reformulées en août 1974.

La division se composait de quatre sections: organisation spatiale, applications et développement de la saisie des données, systèmes de planification et de gestion, et évaluation.

La Section de l'organisation spatiale a fourni une délimitation spatiale des régions géostatistiques pour tout le Canada, analysé les cartes

Division des études et de la statistique démographiques

Le Secteur du recensement s'occupe surtout des recensements décennaux et quinquennaux de la population, du logement et de l'agriculture. En 1974-1975, le travail s'est poursuivi dans l'opti- que de trois recensements, 1971, 1976 et 1981. Le premier d'une série de bulletins établis d'après les données du recensement de 1971 tirées du couplage des dossiers de l'agri- culture et de la population a été publié, ainsi que la première étude analytique sur le recense- ment de 1971. Mille deux cents totalisations ont été effectuées sur commande à partir des données de 1971.

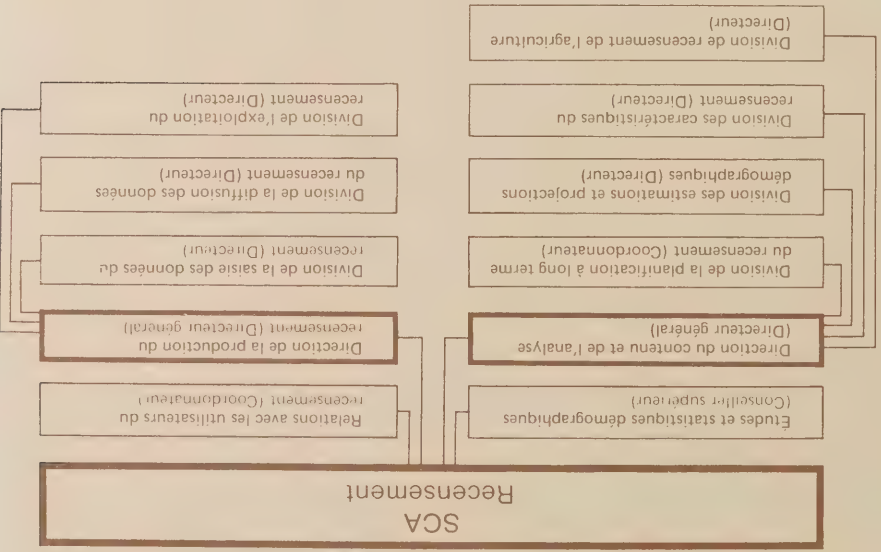
Dés progrès ont été réalisés dans la mise au point de systèmes automatisés en vue d'améliorer le traitement des données du recensement pour 1976. Deux essais, un en mai et un en août 1974, ont aidé à finaliser les procédures, les questionnaires et les livrets d'instructions pour le recensement de 1976. La planification d'essais en vue du recensement de 1981 a été amorcée et des propositions portant sur une série d'objectifs ont été mises au point.

Les principales fonctions de la Division des études et de la statistique démographiques sont a) de favoriser l'utilisation efficace et la deman- de de données statistiques sur la population recueillies par Statistique Canada (qui pro- vient de quatre secteurs différents) par des organismes et des particuliers à l'extérieur de Statistique Canada, et b) de faciliter l'améliora- tion des statistiques sur la population, en particulier dans les domaines qui exigent la collaboration active de deux ou plusieurs divisions de Statistique Canada.

En 1974-75, la Division a poursuivi la planification de la gestion des projets en vue du programme d'études analytiques du recense- ment de 1971. Ces études constituent une part importante de la diffusion des données du recensement de 1971 et présentent des synthèses des données sur les tendances économiques et sociales au cours de l'année, renseigne sur la mobilité de groupes importants au sein de la population canadienne et sur l'importance relative de plusieurs facteurs démographiques, économiques et sociaux de cette mobilité, en soulignant les différences sous l'angle de la profession et du niveau d'instruc- tion.

Le conseiller supérieur a donné des conseils à plusieurs ministères fédéraux et provinciaux ainsi qu'à des organismes privés sur la concep- tion et l'exécution de projets de recherche utilisant les données de Statistique Canada, sur les conséquences que laissent en leur sein les données récentes et futures des aspects démogra- phiques au Canada, et sur la signification et l'usage des données recueillies par Statistique Canada et des données démographiques con- nexes.

La division a préparé et dirigé la production d'un volume spécial renfermant des articles sur



L'état des activités du recensement ont été envoyés régulièrement afin d'analyser les communications entre le Secteur du recense- ment et les ministères provinciaux.

De concert avec la Division de l'information, le Groupe des relations avec les utilisateurs a joué un rôle important en recommandant le choix des agences publicitaires aux fins du programme publicitaire du recensement de 1976. Après avoir évalué les résultats du pro- gramme publicitaire pour le recensement de 1971 et le recensement d'essai de mai 1974, le groupe procède maintenant à la coordination et à la surveillance de tous les aspects du pro- gramme publicitaire du recensement de 1976.

Direction du contenu et de l'analyse

Division de la planification à long terme du recensement

L'une des principales activités de l'année a été une étude de marché détaillée concernant le recensement de 1971. Les renseignements ont été recueillis au moyen d'entrevues person- nelles avec des représentants des ministères et organismes fédéraux, des provinces, des terri- toires, des grandes municipalités du Canada et des utilisateurs réels et possibles des données du recensement dans le secteur privé. Les rensei- gnements supplémentaires ont été obtenus au moyen d'un examen critique de l'élaboration, de la présentation, de la distribution et de la communication du produit du recensement. Plusieurs aspects du recensement ont fait l'objet d'un examen détaillé: contraintes juridi- ques, organisation et procédés du recense- ment, aptitudes technologiques, compétences

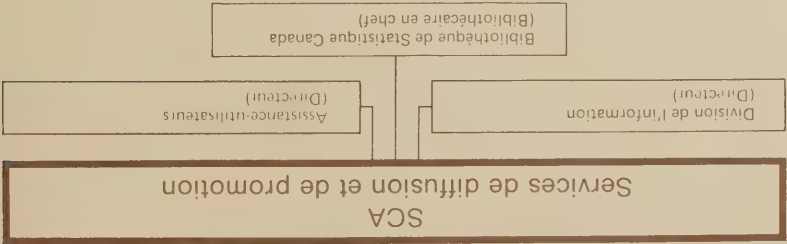
Le Groupe des relations avec les utilisateurs du recensement a entrepris divers projets étayant la politique de Statistique Canada qui préconise une meilleure réponse aux besoins de ses principaux clients et une plus grande informa- tion du public concernant le produit du recen- sement.

La publication d'un bulletin d'information intitulé *Communiqué* a débuté en septembre 1974. Ce bulletin fournit à quelque 400 clients de Statistique Canada (ministères fédéraux et provinciaux, universités, chercheurs du secteur privé et autres abonnés), des renseignements sur les publications, les documents de recherche, les dates de parution et diverses autres questions.

Le groupe a coordonné deux réunions du comité fédéral-provincial des recensements de la population, du logement et de l'agriculture et de trois groupes d'étude fédéraux-provinciaux, qui se sont mis d'accord sur la nature de la participation des provinces aux plans du recen- sement et sur les besoins des utilisateurs pro- vinciaux. Outre *Communiqué*, des rapports sur

Relations avec les utilisateurs

Services de diffusion et de promotion



Ce secteur a pour objet de faire connaître la Statistique Canada, ses programmes, et il encourage l'utilisation sous toutes ses formes des renseignements statistiques.

Services d'information

Cette division fournit de l'information sur les programmes et services de Statistique Canada, ainsi que des programmes de relations publiques à l'appui des objectifs du Bureau.

En plus des fonctions habituelles qui consistent à fournir de la matière aux journales et de la documentation pour les

enquêtes de Statistique Canada, la division a mis en oeuvre des programmes d'information,

de publicité et de relations publiques concernant le recensement d'essai de mai 1974, et

où avait lieu l'essai: Trois-Rivières, North Bay

et Moose Jaw.

La division a surveillé la conception et la réalisation de l'exposition permanente qui est maintenant installée au rez-de-chaussée de

l'immeuble R.H. Coats, du côté nord.

La division s'est occupée de la promotion de la campagne Centraide 1974 au sein de la

Fonction publique.

La division a continué de publier l'*Annuaire du Canada, Canada*, le *Quotidien de Statistique Canada* et *Infomat* à l'intention du grand public, et *SCAN*, la revue des employés de

Statistique Canada. Deux bulletins spéciaux ont été publiés à l'intention des employés au cours

de l'année: *Statistique Canada déménage*, qui donnait des renseignements sur le déménagement

dans le nouvel immeuble R.H. Coats, et *Action*, dans s'intéressait à la promotion de la femme.

En collaboration avec le Conseil de recherche en sciences sociales, la division a entrepris la mise à jour de *Historical Statistics of Canada*, publié pour la première fois en 1965.

Elle a continué à préparer l'appui en matière de relations publiques au recensement de 1976.

Bibliothèque de Statistique Canada

En 1974-75, des progrès ont été réalisés en vue de l'amélioration des services bibliothécaires à

Statistique Canada. Outre la réponse à une demande toujours croissante de service de

référence, de service de prêts entre bibliothèques et de prêts de documents, le personnel a encouragé l'utilisation de CAN/DSI (Diffusion

sélective de l'information), base de données

informatisée dans les domaines socio-économiques.

On a rédigé une publication pour faire mieux connaître la bibliothèque, ses ressources

et ses services, et en collaboration avec la Section de la formation et du perfectionnement du

personnel, un cours mensuel d'orientation à la bibliothèque a été institué.

En juin 1974, la bibliothèque a déménagé dans ses nouveaux locaux de l'immeuble R.H. Coats; elle est désormais mieux installée pour

accueillir ses clients, plus efficace en ce qui a trait au travail et à la disponibilité de ses

services. Elle peut retrouver plus facilement et

plus rapidement les documents reçus.

Le projet de reclassement de la collection a progressé en 1974-75 avec l'achèvement de

tous les titres de périodiques. Pour la première

fois les utilisateurs disposent d'une liste des

périodiques.

Le projet proposé en vue de l'automatisation des systèmes de services techniques a été

approuvé et sa mise au point sera terminée en 1975-76.

Division de l'assistance-utilisateurs

La Section de l'accessibilité et de l'utilisation des données, qui fournit des services aux

utilisateurs de la statistique dans tout le Canada, a renforcé son personnel régional, installé des

terminaux dans un certain nombre de bureaux régionaux et institué un secrétariat téléphonique

automatique de 24 heures à Ottawa; les appels effectués sans frais.

Le personnel des bureaux régionaux a visité toutes les bibliothèques publiques du Canada

possédant des collections complètes des publications de Statistique Canada, s'est rendu

auprès de plus de 100 sociétés, et a présenté des expositions pour la première fois aux

réunions annuelles de divers groupes d'utilisateurs.

Le *Catalogue* de Statistique Canada a été

révisé et publié en anglais et en français sous

Catalogue a été indexé pour la première fois.

La Section des services de consultation, en

collaboration avec le conseiller juridique de

Statistique Canada, a informé le Statisticien en

chef de la compatibilité entre les lois provinciales et la loi fédérale sur la statistique, fourni

aux homologues provinciaux, effectué l'inventaire des activités statistiques de Statistique

Canada (enquêtes, programmes, etc.); fourni des

réunions de secrétariat des conférences à 36

réunions de comités, dont l'une internationale,

et produit un rapport sur le Colloque inter-

régional des Nations Unies sur l'organisation

statistique.

Le travail effectué en 1974-75 a compris: Travaux informatiques traités — 548,411 Programmes exécutés — 1,793,000 Lignes imprimées — 972,377,000 Heures d'utilisation du terminal — 81,609 Bandes magnétiques retenues — 59,449 Documents perforés lors de la saisie des données — 20,927,311 Documents vérifiés lors de la saisie des données — 15,584,124 Documents traités lors du calcul — 377,835

Division des systèmes généraux d'enquêtes

L'élaboration d'un certain nombre de systèmes généraux a été achevée pendant l'année et leur application a produit des résultats intéressants. Le système général pour le contrôle et l'imputation automatique des données qualitatives, CANEDIT (auparavant GEISHA)* a été appliqué à trois projets, notamment au recensement d'essai de la population de 1974. Il s'est avéré fiable et a permis aux utilisateurs d'évaluer les résultats du contrôle et de l'imputation à un degré qui n'avait jamais été atteint par les autres méthodes. En conséquence, des exigences aux fins de l'amélioration de certains algorithmes ont été identifiées et des mesures ont été prises pour y satisfaire. STATAPE**, système de totalisation séquentiel, a été incorporé dans un système de production pour les données du commerce extérieur et est maintenant disponible pour usage général. Le système général d'estimation a été achevé et utilisé dans une application du traitement d'enquête. Il peut maintenant être employé dans tout système de traitement d'enquête par sondage. Un programme général pour la production de fichiers à dactylographie et lecture optique a été écrit et utilisé dans une première application. La première version des Systèmes généraux de traitement d'enquêtes (SGTE), avec ses éléments CANEDIT et STATAPE, a été appliquée dans deux enquêtes "ménages" pour le contrôle et la totalisation des données. Les données ont été trouvées dans le logiciel de gestion de la base de données sur lequel sont fondés les éléments des SGTE. Il a été décidé de ne pas poursuivre avec d'autres applications, mais d'améliorer d'abord l'élément de gestion des données. L'élaboration d'un système de (Relational) Access Processor for Integrated Data) a donc été entrepris afin de fournir un SGBD qui convienne à la plupart des systèmes statistiques de traitement des données à Statistique Canada.

RAPID, basé sur le modèle des données relationnelles, un dictionnaire de données intégrées et un langage raffiné de transformation de la base de données, utilise les SGE élaborés et le concept reconnu des fichiers en série comme technique d'accès aux données. La division espère ainsi avoir un SGBD adéquat lorsque les principaux systèmes de Statistique Canada adopteront la technologie de la base de données. On prévoit également que les programmes généralisés seront basés à l'avenir sur RAPID, qui fournira un moyen souple de gérer les données, qu'elles soient sur bandes ou sur disques.

Division de la vérification, de la planification et de la recherche en automatisation

Les activités de la division en 1974-75 sont décrites sous les rubriques correspondant aux trois sections de la division, plus un groupe divers:

Recherche — Les parties 1 et 3 d'une étude tripartite sur les opérations de traitement des mots à Statistique Canada, se rapportant à l'imprimerie sur ordinateur et au traitement des textes, ont été en grande partie terminées. La matière de techniques de sortie des données, a été amorcée. Une analyse des besoins à court terme de terminaux, demandée par la Division du traitement des données, a été terminée.

Planification — Pendant l'année, la division a préparé le rapport et le plan annuels du traitement électronique des données (TED) de Statistique Canada à l'intention du Conseil du Trésor.

Une enquête détaillée sur les besoins futurs du TED de Statistique Canada a été effectuée et les résultats ont été stockés sous une forme lisible par une machine. Cette information formera l'essentiel d'une base de données qui sera utilisée afin de préparer les rapports du TED et les prévisions des besoins futurs du TED.

Le travail d'élaboration d'un plan stratégique que pour la direction s'est poursuivi.

Vérification — Comme le poste de chef de Section n'a été doté que tard dans l'année, Toutefois, la section a participé au travail du Comité de la sécurité du TED et à l'évaluation des propositions en vue d'obtenir du matériel électronique.

Autre — Le personnel de la division a participé à un certain nombre de programmes de la direction; il a entre autres présidé un groupe d'étude l'aménagement de l'espace pour les disques. En raison d'un manque de personnel de soutien dans toute la direction, la division a contribué à l'établissement du lecteur IBM 1288, de l'imprimeur Xerox 1200 et des services de photocomposition.

A l'occasion, la division a été appelée à aider des divisions spécialisées à préparer des demandes de petits appareils de TED comme des terminaux et des petits lecteurs optiques.

*STATAPE - système général de totalisation qui accepte les données sur bandes magnétiques ou sur disques.

sous une forme lisible par un ordinateur. Depuis le recensement de 1971, la division s'est vu chargée de l'élaboration de procédés détaillés pour le Secteur du recensement, des programmes de formation et du soutien logiciel pour les recensements quinquennaux et décennaux et pour les recensements d'essai du Canada. On se prépare actuellement au recensement de 1976, pour lequel on compte utiliser la formule de l'autodémodérament introduite en 1971, et les améliorations apportées aux procédures par suite du recensement d'essai de la population, du logement et de l'agriculture de 1974 mené auprès des ménages et des exploitations agricoles dans les régions de Moose Jaw, North Bay et Trois-Rivières. La première phase d'une enquête spéciale sur le logement a été terminée. Les interviews ont été menées par 500 interviewers auprès de 75,000 ménages au cours d'une période de deux mois. Pendant l'année, la division a continué ses programmes dans les domaines des prix, des déclarations d'entreprises et des postes vacants. Le projet "Entreagent", a été lancé comme faisant partie d'un programme permanent destiné à sensibiliser d'avantage les interviewers à l'importance des bonnes relations avec les enquêtes. Le programme entier a été produit et exécuté en six semaines et la Section des profs spéciaux l'étend à tout le personnel de la division dans tous les programmes.

Direction des systèmes informatiques et du traitement des données

Cette direction fournit des systèmes étendus de traitement électronique des données (TED) et des services de production aux divisions de Statistique Canada chargées du rassemblement des données et de la diffusion de l'information. Elle se consacre également à des activités de recherche en vue de la mise au point de systèmes généraux et d'éléments de traitement des fichiers de données sur disques concernant les résidents au système d'administration des données, la Section de l'administration des données a proposé un programme de stockage et de conservation un examen des exigences et des bases de données a été établi pour l'ensemble de Statistique Canada et il procède actuellement à un niveau de la conception des bases de données à l'intérieur de Statistique Canada. A la fin de l'année, la fonction d'acceptation du système à l'intérieur de la Section de l'administration des données maintenait l'intégrité opérationnelle d'environ 150 systèmes de production et, en outre, administrait deux grands systèmes de bases de données — le recensement de la population de 1971 et le système de l'administration des données lui-même. La section était également représentée auprès du groupe d'étude sur la sécurité du TED dont a publié un rapport sur la sécurité du TED dont des éléments de nouveaux systèmes généraux réalisés qui pourront être adaptés aux prochains recensements. De plus, elle a introduit un système d'acquisition par Statistique Canada de matériel informatique d'une valeur de plus d'un million de dollars hors du bureau central. La Division fournit un large éventail de soutien logiciel et matériel, et des services de consultation à plus de 500 utilisateurs de l'ordinateur. L'essai du système de saisie et de traitement des données pour le recensement de 1976 a été effectué en utilisant les ordinateurs FOSDIC et les caméras à microfilms dotées d'un mécanisme de tournage automatique et de la diffusion des données ont continué toute l'année.

Division des systèmes informatiques

La division a continué à mettre l'accent sur la formule interdisciplinaire dans l'élaboration et l'intégration de systèmes informatiques. L'intégration signifie normalement le remplacement de plusieurs systèmes indépendants par un seul système, plus étendu, utilisant la technologie de la base de données, des méthodes généralisées et des éléments réduits. Ces mesures sont prises afin de prolonger la vie utile du système et le rendre plus souple et plus utile face à toutes sortes de demandes. Un système de ce genre, le Système intégré des statistiques de l'état civil, remplacera environ 15 systèmes indépendants. Un exemple d'une autre méthode nouvelle est l'utilisation par la nouvelle enquête sur la population active de mini-ordinateurs et de la communication des données. Les données brutes sur la population active sont collectées par le personnel du bureau régional de Statistique Canada, validées par des mini-ordinateurs et transmises quotidiennement au centre de calcul à Ottawa. On étudie actuellement la possibilité de collecter de la même façon des données pour d'autres enquêtes de Statistique Canada. Dans l'élaboration des systèmes de traitement pour le recensement de 1976, l'équipe du recensement affectée à cette tâche a eu recours à des éléments de nouveaux systèmes généraux réalisés qui pourront être adaptés aux prochains recensements. De plus, elle a introduit un système d'acquisition par Statistique Canada de matériel informatique d'une valeur de plus d'un million de dollars hors du bureau central. La Division fournit un large éventail de soutien logiciel et matériel, et des services de consultation à plus de 500 utilisateurs de l'ordinateur. L'essai du système de saisie et de traitement des données pour le recensement de 1976 a été effectué en utilisant les ordinateurs FOSDIC et les caméras à microfilms dotées d'un mécanisme de tournage automatique et de la diffusion des données ont continué toute l'année.

Division du traitement des données

Cette division fournit une grande variété de services, matériels et techniques pour répondre aux besoins du traitement des données de Statistique Canada allant du simple calcul, de l'analyse et du rassemblement des données à l'aide de calculateurs/comptomètres de bureau aux grands et complexes systèmes informatisés qui nécessitent la saisie des données, du matériel auxiliaire, le contrôle et l'ordonnement des données, l'exploitation par ordinateur, la relure et les services de reproduction. La participation de la Section du calcul à la conversion au système métrique s'est intéressée à un certain nombre d'enquêtes. Saisie des données — La conversion des données de leur forme originale à une forme lisible par une machine est exécutée par des lecteurs de marques ou lecteurs optiques de caractères (LOC), des perforatrices/vérificatrices, des machines clavier-disque-bande, et par un réseau mini-informatique à partir des données collectées, traitées et transmises par les huit bureaux régionaux.

Le principal système informatique est une machine IBM S/370-168 dotée de trois mégabits de mémoire, de 5,2 milliards de bits de stockage sur disque et de matériels périphériques tels que des décodeurs de bandes, imprimantes, lecteurs de documents et lecteurs de cartes. Il existe en outre un réseau interne de terminaux composé de plus de 150 machines à écrire/CRT et six terminaux lecteurs/imprimantes. L'élaboration de programmes de travail à distance, l'élaboration de programmes de vérification de textes, etc. Le Centre de calcul fonctionnait à raison de 17 postes ou 136 heures par semaine, plus des heures supplémentaires au besoin. En outre, la division a dirigé l'acquisition par Statistique Canada de matériel informatique d'une valeur de plus d'un million de dollars hors du bureau central. La Division fournit un large éventail de soutien logiciel et matériel, et des services de consultation à plus de 500 utilisateurs de l'ordinateur. L'essai du système de saisie et de traitement des données pour le recensement de 1976 a été effectué en utilisant les ordinateurs FOSDIC et les caméras à microfilms dotées d'un mécanisme de tournage automatique et de la diffusion des données ont continué toute l'année.

portion du registre représentant les entreprises constituées en sociétés a été vérifiée contre le fichier T2 des déclarations d'impôt des sociétés de Revenu Canada.

A la Division du commerce et des services, la division a fourni de l'aide technique et des services de consultation portant sur la méthodologie et les systèmes pour l'enquête sur le commerce de détail, continué l'élaboration de l'enquête sur les marchandises vendues au détail, préparé un plan d'échantillonnage et une procédure d'estimation pour l'enquête sur les organismes de bienfaisance, et mis au point un test de la méthodologie et des systèmes pour le recensement du commerce et des services de 1981.

Dans la Division des transports et des communications, la division a remanié la stratégie et le champ d'observation de l'enquête sur l'origine et la destination du transport routier de marchandises pour compte d'autrui et en location.

Au cours de l'année, la division a commencé à évaluer la faisabilité de l'élaboration d'un système généralisé pour les recensements de la Division de la construction et a comparé et concilié la liste de cette division avec le registre des entreprises.

Pour la Division du travail, la division a préparé le rapport statistique de 1973 pour la collecte des données sur l'emploi et les gains auprès des secteurs de l'éducation, de la santé, du bien-être, de l'administration publique et des petits employeurs, et l'emploi auprès des gros employeurs. Elle a conçu l'enquête de 1975 auprès des employeurs, qui était surtout basée sur les améliorations apportées à l'enquête de référence de 1973, introduit un échantillon rotatif unique pour l'enquête sur l'emploi E2 et le secteur des petites unités de l'enquête sur les postes vacants, modifié le sous-système de totalisation dans E1, et reconstruit l'échantillon dans le secteur des grandes entreprises de l'enquête sur les postes vacants et les étapes de totalisation de l'enquête sur la profession des salariés.

La division a continué de contrôler et d'évaluer l'enquête annuelle (T2) de la Division des finances: l'enquête sur l'amortissement du coût en capital a été menée par la division et la seconde tournée de la méthodologie de l'enquête sur la réforme fiscale a été en grande partie dirigée par la division.

Le fichier principal de la Division du travail (FPD) a été établi en 1974 à partir du registre des entreprises, E1 et des fichiers de l'enquête sur les postes vacants, L'enquête sur la profession des salariés et E2 ont toutes les deux commencé à utiliser le FPD en 1975, et des discussions ont eu lieu avec plusieurs autres

*GEISHA voir la note à la page 21

divisions au sujet de l'introduction de fichiers principaux qui suivraient le système de numérotation du registre des entreprises.

Méthodes de recensement et d'enquêtes "Institutions"

Cette division fournit des services méthodologiques, y compris la conception et l'évaluation d'enquêtes, au Secteur du recensement, à la Division de l'agriculture, aux divisions de la Direction des institutions et des finances publiques, ainsi qu'à la Division du traitement des données; elle fournit des services de consultation en matière de méthodologie à ces divisions, au Secteur du recensement et aux utilisateurs de l'extérieur, et elle dirige des recherches sur la mesure des erreurs de réponse et sur les méthodes de pondération.

La division a participé aux deux derniers projets d'évaluation du recensement de 1971: la contre-vérification des dossiers qui évalue la sous-observation et fournit une analyse des personnes omises, et l'étude de la variance de réponse qui permet de mesurer la fiabilité des estimations du recensement.

A titre de préparation au recensement de 1976, la division a évalué les résultats du recensement d'essai de 1974, notamment l'extension du contrôle qualitatif pour englober les fonctions additionnelles des agents recenseurs, l'utilisation d'un plan d'échantillonnage séquentiel dans le contrôle de la qualité, la qualité du microfilmage, et l'emploi de GEISHA* pour dépister les défauts de vérification. Elle a participé au contrôle qualitatif de l'expression des questions, à une étude de motivation sur la réaction des recensés face au recensement et à sa publicité, à une vérification des logements désignés comme vacants lors de l'essai de 1974, à un essai de formes différentes de questions, de procédures de pondération, et à la conception d'un plan de traitement préalable à la vérification afin de préparer le fichier du recensement pour GEISHA*.

La division a établi un programme de mesure de la qualité des données pour le recensement de 1976, élaboré plusieurs éléments du programme (études du champ d'observation, étude du taux de réponse, et comparaison entre les données sur la population active provenant de l'enquête et celles provenant du recensement) et elle étudie actuellement d'autres projets d'évaluation pour s'assurer que le programme répond à ses objectifs.

La division s'est préparée pour le recensement de 1981 en participant au comité mixte du recensement et des services statistiques qui est chargé de l'élaboration d'un programme de recherche et d'essai pour cette opération.

Pour la Division de l'agriculture, elle a terminé le remaniement de l'enquête descriptive des données agricoles au moyen d'un sondage annuel, la grande enquête destinée à collecter des données agricoles au moyen d'un sondage probabiliste, et dont les résultats servent à établir des estimations annuelles pour le Canada et

Services statistiques

Ce secteur soutient les opérations de collecte et de compilation des données, y compris la méthodologie d'enquête, le travail d'enquête sur le terrain et le traitement des données.

Division de l'élaboration "Ménages" d'enquêtes

Cette division a quatre principales fonctions et domaines de responsabilité en matière de méthodologie

La Sous-division de la recherche et du développement méthodologiques

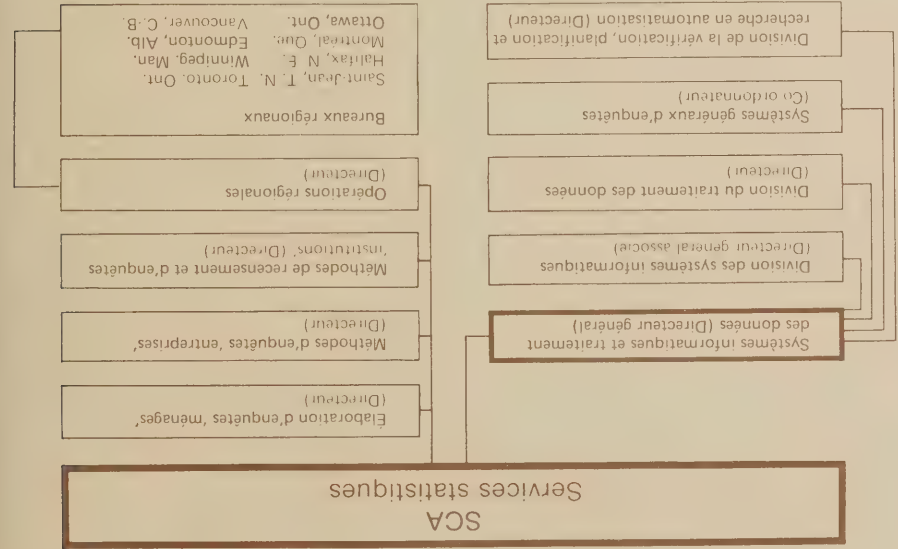
Elle voit à effectuer des recherches dans le domaine des erreurs de réponse et de l'analyse des données d'enquête, surtout en ce qui concerne l'enquête sur la population active, et à fournir des services méthodologiques tels que la conception d'échantillons, l'estimation et le contrôle relativement à un certain nombre d'enquêtes "Ménages". Elle répond également aux besoins méthodologiques des divisions de l'enquête sur la population active, du revenu et des dépenses des consommateurs, et des flux financiers et des entreprises multinationales.

De concert avec l'Administration du personnel (formation et perfectionnement du personnel), la sous-division a organisé six cours qui sont tous donnés par des membres de la Division de l'élaboration d'enquêtes "Ménages". Ces cours s'adressent à certains spécialistes de Statistique Canada et comprennent : théorie de l'échantillonnage, calculateur à jet préimprimé, l'échantillonnage sur un sujet spécial, méthodes statistiques, introduction à l'économétrie, et recherche expérimentale.

La Sous-division de la méthodologie de la collecte des données

Elle veille sur le développement de l'échantillonnage et de la collecte des données et sur le contrôle et l'évaluation du genre le plus directement appliqué. Elle travaille quotidiennement en collaboration étroite avec la Division des opérations régionales et fournit à cette division des services statistiques et techniques. Elle s'occupe également de la qualité des données et l'effet des procédures de collecte des données sur les estimations.

Voici des exemples de certaines activités de la sous-division : a) le programme d'assurance-qualité, destiné à contrôler les diverses mesures de rendement relatives à la conception et à l'analyse, ainsi qu'aux opérations régionales. Ce programme comprend le contrôle du glissement, des indices de stratifications, des divers biais, de la non-réponse, du coût du dénombrement, des normes de rendement des enquêteurs, etc.; b) le contrôle et développement de l'échantillon qui assure presque tout l'échantillonnage arelaire à Statistique Canada, établissant des plans d'échantillonnage, préparant le matériel d'échantillonnage pour les opérations sur le terrain, identifiant et définissant les unités d'échantillonnage, et aidant à l'élaboration et au contrôle du



fournir des services de consultation à d'autres services dans le domaine des statistiques méth-
matiques et des recherches en matière d'enquête.
Ce groupe s'occupe également de la production
mensuelle de coefficients de variation pour de
nombreuses caractéristiques de l'enquête sur la
population active et pour les écarts-types de
variation à partir d'un mois ou d'une année,
sur demande. En outre, il coordonne et élabore
de nouvelles formules concernant la théorie de
la conception des enquêtes.
Enfin, dans la diffusion de l'information sur
la méthodologie, la division organise une série
de colloques sur des sujets d'intérêt général et
elle a lancé une série de notes techniques et un
journal, *Méthodologie d'enquête*.

Division des méthodes d'enquêtes "Entreprises"
La Division de méthodes d'enquêtes "Entrepre-
ses" est chargée des services de méthodologie
de systèmes et de l'élaboration d'enquêtes
menées par le Secteur des entreprises. Ses servi-
ces sont offerts à d'autres divisions de Statisti-
que Canada et à certains organismes de
l'extérieur qui s'intéressent à la statistique des
entreprises.
Pour la Division des profils et registres
d'entreprises, la division a apporté d'autres amé-
liorations au registre des entreprises, concilié
diverses listes à partir du registre, commencé
l'élaboration d'un système de tenue à jour
d'une base de données pour le registre en rem-
placement du système à bandes, terminé des
systèmes et procédures normalisés (autre que
des systèmes informatiques) pour les profils
d'entreprises pour toute catégorie de renseigne-
ments, et déterminé et choisi un échantillon de
déclarants fiscaux non constitués en sociétés
(déclarations T1), avec ou sans employés. La

qui comprend la recherche et l'essai de nouvelles
façon d'interviewer et d'autres procédures
pour le travail sur le terrain.

Enquêtes spéciales et "règle des dix"
Cette sous-division est chargée de l'élaboration
de la méthodologie des enquêtes spéciales
coordonnées par la Division de la coordination
des enquêtes spéciales.

statistiques aux ministères fédéraux et des ser-
vices méthodologiques dans le cadre de l'admi-
nistration des directives de la "règle des dix".
Le coût de la plupart des services fournis par
cette sous-division est remboursé. Voici des
exemples de certaines activités importantes de
cette sous-division : l'enquête 1974 et 1975 de
la S.C.H.L. sur le logement, les enquêtes com-
plémentaires qui sont menées tous les mois en
même temps que l'enquête sur la population
active, certaines activités de loisir, l'enquête sur
les petits salaires, l'enquête de la S.C.H.L. sur
les logements mis en chantier et achevés, et
l'enquête sur les immigrants.

En ce qui concerne l'application de la direc-
tive de la "règle des dix" (Circulaire du Conseil
du Trésor 1974 — 162, Lignes directrices con-
cernant les demandes de renseignements de plus
de dix répondants), la sous-division est un point
de convergence sur le plan méthodologique à
l'interieur de Statistique Canada. A cet égard,
elle a pour objectifs d'améliorer la qualité tech-
nique des enquêtes effectuées par les ministères
fédéraux, d'éviter le double-emploi et de réduire
le fardeau des répondants. Cette sous-division
s'occupe également, de concert avec d'autres
divisions, d'un travail d'élaboration portant sur
des systèmes généraux de conception d'enquê-
tes.

En plus des trois principales activités décrit-
tes ci-dessus, il existe un groupe à l'intérieur de
la division dont la principale fonction est d'ef-
fectuer des recherches méthodologiques et de

La division a formé une section de la recherche et de l'analyse chargée entre autres d'accroître le contenu analytique des publications et des programmes existants, de lancer de nouvelles publications, de favoriser une meilleure utilisation des données existantes et d'amorcer de nouveaux programmes visant à intégrer et à renforcer la statistique judiciaire au Canada.

Une étude de la Loi sur la réforme du cautionnement amorcée en 1973-74 pour le compte du ministre de la Justice s'est terminée en juillet 1974. Ce ministre l'a mise à la disposition des procureurs généraux des provinces la même année.

Dans le cadre d'une enquête nationale sur les actes de procédure propres aux affaires et aux tribunaux civils, la division a recueilli des données provenant d'un échantillon aléatoire de cas soumis aux tribunaux civils en 1971 à tous les niveaux dans les grandes villes de neuf provinces et des deux territoires. Les résultats préliminaires seront disponibles à la fin de 1975.

Une enquête sur les vols de véhicules automobiles menée en collaboration avec l'Association des chefs de police du Canada a porté sur les conditions entourant tous les vols de ce type signalés à la police canadienne en septembre et octobre 1974. Les résultats sont parus en juin 1975.

La mise en oeuvre des plans élaborés en 1973-74 en vue d'améliorer et d'élargir la statistique correctionnelle a progressé en 1974-75 grâce à la mise au point d'un système d'informations détaillées sur les adultes détenus dans les établissements de correction provinciaux. Ce système a été entièrement appliqué dans les provinces Maritimes. Des progrès ont également été réalisés en vue de l'établissement d'un programme concernant la libération conditionnelle. Parallèlement, une équipe interministérielle a été créée pour s'occuper de l'amélioration du programme fédéral de la statistique pénitentiaire.

sur les services d'urgence.

En 1975, on a mené une enquête sur les services internes de traitement pour les enfants atteints de troubles émotifs.

La Section des installations de soins spéciaux a mené une enquête-inventaire, la première du genre, sur les services canadiens de soins spéciaux à domicile, et a entrepris d'établir un système de collecte de données sur les services assurés par les infirmières de l'Ordre de Victoria et sur les caractéristiques de leurs malades.

La Section de la main-d'œuvre sanitaire recueille et diffuse des données sur les caractéristiques démographiques du personnel sanitaire au Canada. Les groupes suivants sont vus par les enquêtes menées périodiquement: infirmières autorisées, physiothérapeutes, ergothérapeutes, techniciens en radiologie, médecins et chirurgiens. La préparation de l'enquête sur les hygiénistes dentaires est terminée et celle-ci devrait débiter au cours de la prochaine année financière.

La Sous-section de l'économie sanitaire a été créée en septembre 1974 pour étudier en profondeur tous les aspects de l'économie de la santé et des soins médicaux au Canada.

Au cours de l'année, la sous-section a collaboré avec Santé et Bien-être social Canada dans des domaines tels que la révision des statistiques et de la méthodologie concernant les dépenses sanitaires, les données sur le revenu des médecins et des dentistes et la répartition de la main-d'œuvre sanitaire dans les régions rurales et urbaines afin d'améliorer les sources actuelles de données.

Des études sur le personnel médical et les dépenses en soins de santé porteront l'an prochain.

Division de la statistique judiciaire

Cette année, la Division de la statistique judiciaire a entrepris un certain nombre de nouvelles activités pour élargir son programme permanent de présentation de renseignements sur le processus judiciaire, l'application de la loi et les services de réadapation.

Un satellite de Statistique Canada a été mis sur pied au Ministère du solliciteur général pour répondre aux besoins en données statistiques des deux organismes et à ceux de la G.R.C., du Service canadien des pénitenciers et de la Commission nationale des libérations conditionnelles. Ce satellite exerce son activité à partir des bureaux du ministère situés sur la rue Sparks à Ottawa.

Au terme d'une conférence fédérale-provinciale tenue en juin ont été créés un comité consultatif fédéral-provincial permanent de l'information et de la statistique judiciaires et des groupes d'étude chargés de sujets tels la production future des données et les définitions courantes en matière de justice pénale.

Statistique Canada collabore en fournissant des services de secrétariat et en participant activement au travail des groupes d'étude,

Ménages et institutions

Le Secteur ménages et institutions a pour tâche de présenter une vaste gamme de renseignements socio-économiques sur les Canadiens, leurs activités et les institutions qui les servent. Des données sont publiées sur les naissances, les décès et les mariages; l'emploi et le chômage; le revenu, l'avoir et la dette des particuliers; les dépenses des consommateurs et des administrations publiques; l'éducation, la criminalité, les activités des tribunaux de police et des établissements de correction; la santé et le bien-être social.

Un des principaux aspects du programme de ce secteur en 1974-75 a été la mise en oeuvre de la *Règle des dix*, lignes directrices du Conseil du Trésor destinée à réduire le double emploi, à alléger le fardeau des répondants, à accroître l'utilité des résultats d'enquête et à coordonner les activités d'enquête au niveau fédéral.

Statistique des ménages

Outre les responsabilités qui lui incombent dans le cadre des enquêtes permanentes auprès des ménages sur l'emploi, le revenu et les dépenses des familles, et des enquêtes spéciales auprès des ménages, la Direction de la statistique des ménages a entrepris des activités importantes dans deux grands domaines: la planification globale de la statistique sociale et la participation à d'importants programmes internationaux et nationaux.

Le personnel a été recruté pour mettre au point et intégrer la statistique sociale et les indicateurs sociaux. La direction a travaillé en priorité à un plan visant à améliorer et à étendre les enquêtes sur les ménages, et à des activités connexes telle le programme de recherche analytique. Des travaux ont été amorcés relativement à la normalisation des concepts d'enquête.

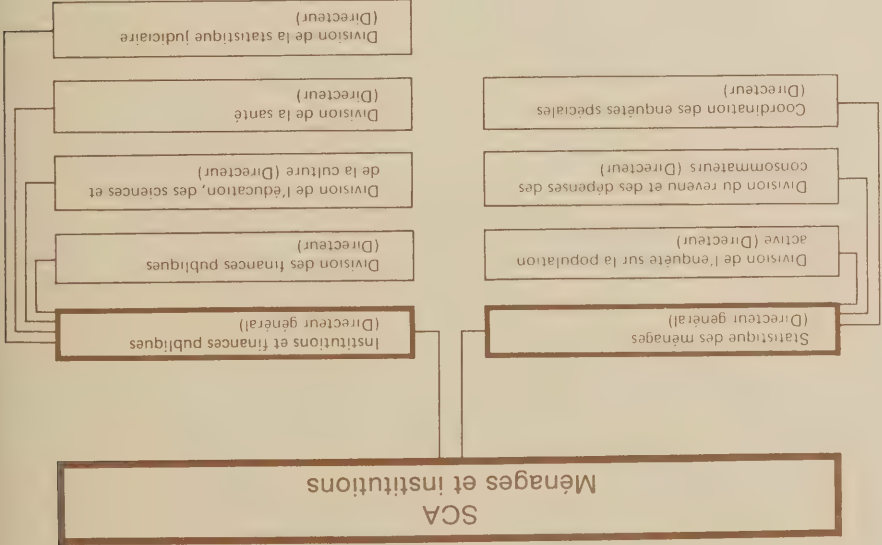
Division de

l'enquête sur la population active

Cette division effectue l'enquête mensuelle sur la population active, publie un bulletin mensuel et annuel sur la participation à la population active et produit des taux d'emploi et de chômage dans diverses totalisations recoupées. Dans le bulletin mensuel intitulé *La population active* (71-001), trois nouvelles séries de données ont été introduites: le chômage et le taux de chômage selon la branche d'activité; le chômage et le taux de chômage selon l'occupation; et la population active selon la branche d'activité et l'occupation.

Outre le travail relatif à l'enquête actuelle sur la population active, la division se consacre au projet important de révision et d'élargissement de l'enquête. Le but premier de la révision est de répondre à la demande de données nouvelles et plus exhaustives sur le marché du travail. Les nouveaux domaines qui font l'objet d'une demande peuvent être regroupés en trois catégories générales:

1. demande de nouveaux genres de renseignements traduisant davantage les complexités de



la conjoncture sur le marché du travail;

2. demande de nouveaux renseignements sur les aspects dynamiques de la population active; et 3. demande d'un échantillon plus vaste permettant de produire des données plus fiables aux niveaux provincial et intraprovincial et des classifications recoupées plus détaillées à tous les niveaux de regroupement.

La nouvelle enquête, dont l'introduction est prévue pour janvier 1976, comporte un certain nombre de vérifications automatisées au niveau démographique (ce qui est impossible dans l'enquête actuelle) qui permettront de produire des données améliorées sur la famille et, de façon générale, des données plus fiables. Les résultats d'études spécialisées sur les concepts, le contenu, les techniques d'enquête et le contrôle qualitatif seront intégrés dans la phase finale de la nouvelle enquête.

Le remaniement de l'échantillon de l'enquête, entreprise à la suite de chaque recensement décennal pour tenir compte des changements démographiques, sera fondée sur l'échantillon modifié et sur les projections démographiques du recensement de 1971.

Division du revenu

et des dépenses

des consommateurs

Un certain nombre de réalisations sont à signaler dans le cadre des trois programmes d'enquêtes permanentes auprès des ménages qui relèvent de la Division du revenu et des dépenses des consommateurs. Une enquête courante sur l'équipement des ménages a été menée en avril 1974, le rapport annuel est paru à l'automne et les estimations des erreurs d'échantillonnage sont maintenant disponibles. Les données de 1967 et de 1971

ont été révisées à la lumière des estimations du recensement 1971.

A partir de l'enquête sur les finances des consommateurs, des bulletins courants faisant état de la répartition du revenu pour 1972 (numéros 13-207 et 13-208) ont été publiés, ainsi qu'un bulletin préliminaire sur les revenus pour 1973 fondé sur les données recueillies en 1974. Une nouvelle série sur le revenu basée sur le concept du revenu après impôt a été amorcée. *Revenu après impôt, répartition selon la taille du revenu au Canada, 1971* (13-210) est le premier bulletin et la division espère être en mesure d'en fournir les données tous les ans. La section chargée des enquêtes sur les dépenses des familles a publié *Dépenses des familles urbaines, 1972* (62-541), d'après un petit échantillon prélevé dans huit grands centres métropolitains et à Whitehorse et Yellowknife.

Les résultats préliminaires d'une enquête sur les dépenses alimentaires auprès de 14 000 familles habitant 14 grands centres menés au cours de l'année ont été publiés à l'été de 1975, et une enquête de rappel complète sur le budget présentant une taille et un champ d'observation identiques menée en janvier, février et mars 1975 a permis de recueillir des données sur les régimes de dépenses en 1974. Outre ces enquêtes et les programmes de publication connexes, la division s'est consacrée à diverses activités de recherche. Le bulletin *Estimations du revenu pour les comtés et les divisions de recensement de 1966 à 1969* (13-204) est paru, mais, faute de ressources, il a fallu abandonner les travaux portant sur les estimations du revenu au niveau des petits secteurs.

Les travaux préparatoires se sont poursuivis dans le cadre du projet d'analyses des changements survenus dans la répartition des revenus à l'aide des données du recensement de 1961 et de 1971. La division a continué l'analyse spéciale des données d'enquête, en particulier

Division des analyses de conjoncture

Cette division fait de la recherche appliquée en prévisions économiques, économétrie et désa-
sonnalisation. Elle est également chargée de
l'établissement et de la gestion de CANSIM*
(Système canadien d'information socio-écono-
mique) et de la publication de la *Revue statis-
tique du Canada*.

La Sous-section de la désa saisonnalisation du
service des données chronologiques générales
effectue une recherche analytique axée sur la
solution de problèmes et fournit un service de
consultation sur les méthodes de désa saisonnal-
isation. Une nouvelle technique d'estimation des
coefficients saisonniers de prévision non-biaisés
a été établie pour les séries de l'enquête sur la
population active en se servant de la méthode
X-11 et celle de Box et Jenkins. Les tests
mathématiques spéciaux mis au point pendant
l'année financière pour analyser les révisions
des coefficients saisonniers ont été programmés
pour utilisation générale.

Le nombre de séries CANSIM est passé de
50,000 à 97,000 dans l'année et un système de
communications par téléphones et terminaux a
été établi reliant la base de données à neuf
villes importantes du Canada. Le développement
de la base de données et le réseau téléphonique
ont contribué à une plus grande utilisation de
CANSIM.

Pendant l'année, CANSIM a également
entrepris la mise en oeuvre de SJAC (système
de jonction Alphatext CANSIM) élaboré l'année
précédente.
Trois publications sont parues avec ce système
et trois autres sont à différentes étapes de leur
production.
La Sous-section des cycles d'affaires a été
formée pendant l'année et elle a embauché trois
employés. Elle a rassemblé une base de données
d'environ 350 séries mensuelles et écrit des pro-
grammes d'ordinateur en vue de la confection
de filtres pour les séries chronologiques, qui
atténueraient les erreurs de signal des indica-
teurs économiques. Divers filtres d'essai sont
élaborés et appliqués à un petit groupe d'indica-
teurs. Les résultats sont encouragés et
confirment la démarche initiale pour atténuer le
problème de signal erroné.
Un modèle économétrique prototype de
l'économie canadienne est maintenant en ex-
ploitation et il sert à la préparation des comptes
nationaux trimestriels. La désa saisonnalisation et
l'amélioration du modèle se poursuivent.

*CANSIM est une base de données informatisée
et continuellement mise à jour renfermant toute
une gamme de renseignements socio-écono-
miques qui sont accessibles aux administrations,
au monde des affaires, aux employeurs et aux pro-
fessionnels sous forme d'imprimés mécano-
graphiques ou de support lisible par machine.

teurs par l'intermédiaire de CANSIM*. Ce travail s'effectue avec la collaboration des divisions du bureau qui en fournissent les données.

Division de

l'analyse structurelle

et recherche en productivité

La division est chargée d'élaborer et de mettre en application les modèles structurels de l'économie canadienne. Son programme vise à fournir un cadre d'intégration et d'évaluation des statistiques économiques; à rendre accessible l'information analytique à ceux qui prennent des décisions en matière d'économie; à faciliter la communication entre ceux qui recueillent les statistiques et ceux qui s'en servent pour l'analyse économique; à assurer des services de consultation et d'aide pour le fonctionnement des modèles. La consultation appropriée à un utilisateur est assurée contre remboursement des frais.

Les modèles d'entrées-sorties et des prix décrits dans le guide des utilisateurs portant sur les modèles économiques structurels ont été mis à la disposition des utilisateurs pendant l'année. Trois modèles supplémentaires devraient être exploitables et disponibles en 1975:

1. Modèle à long terme — Un cadre informatif-long permettant l'analyse des tendances à long terme des variables économiques et démographiques importantes en fonction du schéma implicite de l'activité industrielle et de la cohérence interne du système qui en résulte.
2. Modèle inter-régional — Un modèle statique d'entrées-sorties fondé sur les données de provinces et les industries.
3. Modèle énergétique — Développement du modèle d'entrées-sorties qui calcule les besoins énergétiques en termes physiques et qui sert au calcul de l'intensité énergétique et de la consommation nette d'énergie.

Systèmes des comptes nationaux (courants)

Division du produit national brut

Cette division est chargée de préparer et diffuser les comptes nationaux trimestriels, annuels et historiques des revenus et des dépenses, portant sur le revenu national, le produit national brut et les dépenses nationales brutes (en dollars courants et constants) des quatre grands secteurs de l'économie. La division s'occupe également des activités permanentes d'analyse et de développement.

Une entente fédérale-provinciale conclue en mai a amené la division à entreprendre un programme de recherche visant à évaluer la répartition provinciale du produit intérieur brut pour l'ensemble du Canada. Les concepts, la méthodologie et les sources de données font l'objet d'une étude conjointe du bureau, des organismes statistiques provinciaux et des représentants d'autres ministères fédéraux. L'estimation de la répartition des grands agrégats a fait des progrès considérables et des résultats préliminaires sont attendus vers le milieu de 1975.

La rédaction du nouveau document de référence sur les comptes nationaux des revenus et des dépenses est terminée et sa traduction est en cours. Ce document, qui paraîtra vers la fin de 1975, renferme tous les changements de concepts, de méthodologie et de sources introduits dans les comptes depuis 1956.

Division de la balance des paiements

Les responsabilités premières de la division sont la confection, l'analyse et la publication de statistiques et de rapports concernant:

- a) la balance des paiements sur les opérations entre le Canada et les autres pays et les variations des réserves monétaires officielles du Canada, et
- b) la balance des investissements internationaux du Canada, dont la ventilation des dettes et créances extérieures.

La division a publié des rapports trimestriels et annuels sur la balance canadienne des paiements internationaux et des rapports mensuels sur les opérations sur valeurs mobilières avec des non-résidents. Une étude a été faite sur le bilan canadien des investissements internationaux pour la période de 1968 à 1970 et a également publié une projection des ratios de contrôle pour 1974 portant sur les grandes branches d'activité économique au Canada d'après les changements connus dans le contrôle des grandes sociétés.

Parmi les événements particuliers de l'année, il convient de signaler une enquête spéciale sur les recettes et les paiements au titre des services pour 1973, l'établissement de statistiques mensuelles du commerce extérieur sur la base de la balance des paiements et les conseils fournis au Fonds monétaire international dans le cadre de la révision de son manuel sur la balance des paiements.

Division du produit industriel

Le supplément annuel de 1975 au rapport mensuel *Indices du produit intérieur réel par industrie* n'était pas prêt à accepter la conversion intégrale du système à la pondération et la base de référence 1971. Les indices rajoints seront publiés vers la fin de 1975 dans un nouveau rapport annuel.

La division publie également des renseignements sur la valeur ajoutée en dollars courants pour les industries de biens par province et territoire. Les données pour la période de 1926 à 1973 sont présentées dans le *Relève de la production, 1973* publié en juillet 1975.

Le personnel de la division poursuit ses recherches sur la mesure des sorties réelles et de la productivité pour les entreprises non commerciales et un certain nombre d'autres industries de services, en particulier les branches de la finance et l'assurance.

Division des flux financiers et des entreprises multinationales

La division calcule, analyse et diffuse trois séries de statistiques sur l'économie. La première concerne les flux financiers au Canada et est fondée sur un système visant à intégrer les statistiques sur le financement de la production courante et à retracer le mouvement des fonds entre les divers secteurs de prêt et d'emprunt. La deuxième série se compose d'estimations des voyageurs internationaux entre le Canada et tous les autres pays et donne leur nombre et leurs caractéristiques. La troisième consiste à améliorer la base statistique nécessaire pour étudier la structure et les activités des entreprises multinationales.

Une série chronologique révisée des comptes des flux financiers pour la période de 1962 à 1969 a été publiée dans CANSIM*. De plus, dans le cadre d'un programme continu, les descriptions des sources et des méthodes de calcul des comptes des flux financiers pour quatre branches de l'économie ont été publiées. Des enquêtes-pilotes sur les voyageurs internationaux ont été menées à l'aéroport Malton de Toronto et aux principaux postes frontaliers de l'Ontario afin de mettre à l'essai les méthodes d'enquête actuelles et d'autres moyens de recueillir les données.

La Section des entreprises multinationales, créée au milieu de l'année, a fait une étude sur les besoins de données intégrées pour l'analyse empirique et les décisions de politique touchant la domination étrangère des sociétés canadiennes. En raison des demandes de la part d'utilisateurs, les efforts ont porté surtout sur les entreprises canadiennes sous contrôle étranger. La section a également étudié la faisabilité d'établir une série statistique sur la mainmise étrangère de l'économie canadienne.

*CANSIM voir la note à la page 13

Comptes économiques et intégration

Ce secteur comprend la Direction du système des comptes nationaux (Courants), la Direction du système des comptes nationaux (Structur-els), le Conseiller supérieur en intégration et le Coordonnateur de la statistique financière.

Coordonnateur de la statistique financière

En collaboration avec les représentants des provinces, le coordonnateur procède à l'expansion de l'information disponible sur les hypothèses par l'exploitation des actes d'enregistrement hypothécaires. Toutes les provinces sont touchées et plusieurs d'entre elles fournissent maintenant des renseignements. En ce qui concerne les communications par ordinateur, la classification du matériel a été distribuée et les travaux sur la documentation de l'offre et de l'utilisation du matériel et des services relatifs aux communications par ordinateur vont bon train.

Conseiller supérieur en intégration

Sous la surveillance du Conseiller supérieur en

Perspectives Canada, a été achevé et l'ouvrage a

paru à l'automne 1974.

Par suite de l'encouragement reçu des

utilisateurs de la publication, lors d'un colloque

tenu à Ottawa, il a été décidé de publier des

numéros supplémentaires de *Perspectives*

Canada à des intervalles irréguliers. La deuxième

édition est actuellement en cours de rédaction.

Une étude préliminaire de la faisabilité

d'une mesure nette du bien-être a abouti à la

réduction d'une monographie intitulée "Exa-

men de quelques propositions récentes visant à

modifier et à étendre la mesure du P.N.B." qui

étudie l'élargissement possible du P.N.B.

Le personnel a terminé un projet-pilote sur

les indicateurs de l'environnement urbain qui

traite du transport et de l'accès aux loisirs dans

la région d'Ottawa.

Par l'intermédiaire de ce bureau, Statistique

Canada dirige également un comité intermini-

tériel qui planifiera et contrôlera l'établissement

de données sur l'environnement du Canada. Ce

comité a entrepris l'élaboration d'un cadre pour

les données sur l'environnement et on prépare

la rédaction d'un guide sur les données à incli-

des données environnementales.

Système des comptes nationaux (structuels)

La Direction des comptes structuels est char-

gée des estimations de référence, de l'élabora-

tion et la mise en oeuvre de modèles structuels

économiques, notamment les tableaux

d'entrées-sorties, de l'établissement des classifi-

cations-types nécessaires à l'intégration des

statistiques économiques produites par le

bureau, à l'établissement de classifications types

et à la recherche structurelle.

Division des normes

La Division des normes est chargée de contrôler

les classifications et concepts pour le bureau.

Pendant l'année, elle a participé à l'effort du

bureau pour améliorer la documentation en

données, a fait des travaux préliminaires sur les

conséquences de la métatisation et a aidé un

comité interministériel à coder et à classer les

opérations financières de l'administration fédé-

rale.

Les travaux se poursuivent sur la classifica-

tion-type des occupations, marchandises, indus-

tries et services et la classification géographique

type.

Classification professionnelle

Cette sous-section assure un service de consul-

tation et de soutien à ceux qui s'occupaient

des données professionnelles tirées du recense-

ment de 1971, du codage professionnel

décollant de l'enquête postcensitaire sur la

main-d'œuvre hautement spécialisée et de celle

sur la profession des salariés. Elle a discuté avec

le ministère de la Main-d'œuvre et de l'Immi-

gration de la révision de la classification

canadienne descriptive des professions afin

d'identifier les différences entre cette classifi-

cation et la classification des professions canadienne

pour le recensement de 1971. Ces démarches

devraient améliorer la classification canadienne

descriptive des professions.

Classification des produits

La révision de la classification-type des produits

est poursuivie. La classification par groupe

principal de marchandises, héritée de la Division

des entrées-sorties, est conciliée avec la classifi-

cation type des produits et le résultat de ce

rapprochement déterminera le format des volu-

mes II et III de la classification révisée.

Classification géographique type

La première édition de la classification géogra-

phique type doit paraître en 1975.

Classification des services

Un deuxième projet de classification a été

distribué aux fins de commentaire et la version

définitive en sera tirée bientôt.

Division des entrées-sorties

Cette division est chargée de l'élaboration des

tableaux annuels d'entrées-sorties, du program-

me d'intégration complète des révisions défini-

tives dans les comptes des comptes nationaux et

l'intérieur du système des comptes nationaux et

de la mesure de la productivité du travail dans

les industries commerciales et dans certains

groupes d'industries secondaires.

Pendant l'année, elle a terminé les tableaux

annuels d'entrées-sorties pour 1962-1966 et des

tableaux sommaires ont paru dans la *Revue*

statistique du Canada de février 1975. La

division a repris la mesure de la productivité des

aggrégats; des estimations corrigées sur la produc-

tivité pour 1946-1972 ont été publiées en août

1975.

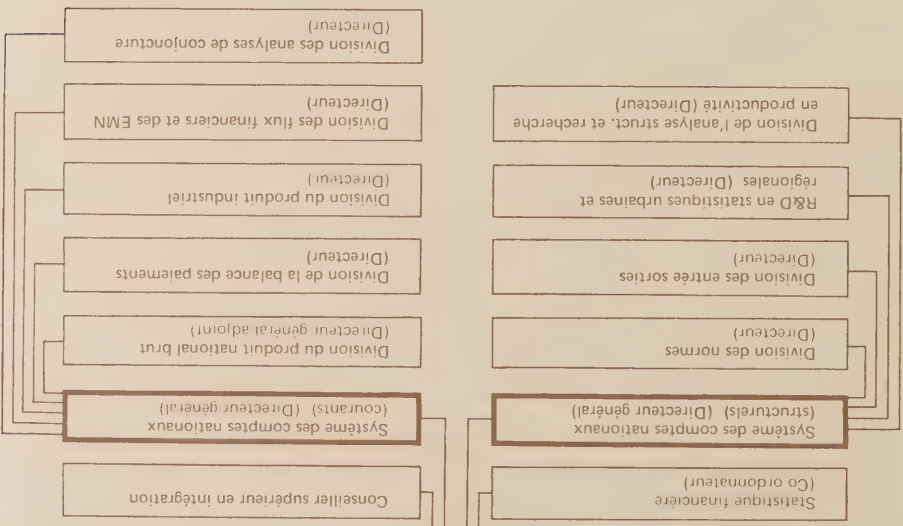
Division de la recherche et du développement en statistiques urbaines et régionales

La division est chargée de l'établissement d'une

base de données urbaines accessible aux utilisas-

11

SCA Comptes économiques et intégration



questionnaire; un suivi plus poussé a amélioré le taux de réponse.

A compter du troisième trimestre de 1974, la division a publié des données financières provisoires 45 jours après le trimestre de

référence — ce qui représente un exploit.

La revue *Statistique financière* (61—006), dont la parution a été avancée de près d'un

mois, comprenait pour la première fois des données sur les banques à charte et les sociétés de prêts, dans le cas de ces dernières grâce à un champ d'observation élargi et un meilleur taux

de réponse. Les données industrielles publiées dans cette revue ont été versées au cours de l'année dans la banque de données CANSIM.*

Le champ d'observation des courtiers en valeurs immobilières a doublé, celui des sociétés de placements en holding a triplé et celui des

fonds mutuels a augmenté d'environ 30 %. A noter également les améliorations

à deux autres rapports, *Faillites commerciales* (61—002) et *Caisse d'épargne et de crédit* (61—209), le dernier par suite d'une révision

du questionnaire.

La publication annuelle *Loi sur les déclarations des corporations et des syndicats ouvriers — Partie 1 — Corporations* (62—210) pour l'année

1972 a été déposée au Parlement un peu plus tôt que l'année précédente et comprenait deux

nouvelles séries de données: un état de la provenance et de l'emploi des fonds ainsi qu'un

bilan et un état du revenu et des dépenses tant des sociétés sous contrôle canadien qu'étranger.

Le rapport sur les syndicats ouvriers (71—202) présente annuellement au Parlement en vertu de CALURA a été publié en août, soit

à une date plus hâtive que par les années passées. Une nouvelle édition de *Liens de parenté*

entre firmes (61—512) basée sur les données de 1972 a mis à jour la précédente qui portait sur

1969. Le pourcentage ultime d'appartenance étranger de chaque société nommée y figure

pour la première fois.

Enfin, il y a les publications suivantes: *Statistique financière des sociétés* (61—207),

édition de 1971, qui présente une plus grande ventilation financière et industrielle, et

Statistique fiscale des sociétés (61—208), édition 1971, qui donne plus de détails sur la

répartition du revenu imposable.

Division du travail

La Division du travail s'occupe des statistiques sur l'emploi, le revenu du travail, le coût du

travail pour l'employeur, la profession des salariés, les postes vacants, les régimes de

pension et les statistiques relatives à la Commission d'assurance-chômage et aux Centres de

d'une plus grande ventilation industrielle. Aux renseignements sur les postes vacants se sont jointes au cours de l'année les moyennes

annuelles des taux minimum de rémunération à l'embauche pour la période 1971-1974. Ces

données sur la rémunération ajoutent une nouvelle dimension aux données sur les postes

vacants utilisées dans le cadre des analyses du marché du travail.

Un nouveau communiqué trimestriel, "Statistiques provisoires sur les postes vacants", lancé en septembre 1974, a fourni des données

semaines avant leur publication dans le *Rapport trimestriel sur les postes vacants* (71—002). Des

données détaillées peuvent être obtenues sur demande.

Un nouveau système de rotation de l'échantillon, introduit dans la collecte des données sur

les postes vacants et sur l'emploi des petites entreprises en janvier 1975, vient alléger la

tâche des enquêtes en diminuant la période moyenne pendant laquelle une entreprise

donnée fera partie de l'échantillon.

Une enquête sur les coûts de main-d'œuvre pour l'employeur en éducation laissant, pour la

première fois, aux bureaux régionaux le soin de faire l'envoi et le rappel a révélé que pour les

petites enquêtes, cette méthode permet de réduire les coûts et d'améliorer l'actualité.

Une étude a été faite en 1974 sur les méthodes de déclaration et la tenue des livres

dans l'industrie forestière à l'est des montagnes Rocheuses afin d'évaluer, la pertinence des

concepts utilisés dans l'enquête mensuelle sur l'emploi et la rémunération, l'aptitude des

employeurs à déclarer les données sur l'emploi et la rémunération et la qualité des renseignements recueillis.

Un rapport exhaustif d'une enquête spéciale sur l'emploi, les gains et les heures de travail

dans le secteur finance, assurance et immeuble a fourni des statistiques distinctes sur l'emploi,

la rémunération et les heures pour les hommes et les femmes, les employés à temps partiel et

les occasionnels à temps partiel dans cinq principales catégories professionnelles et trois

principaux groupes d'industrie.

L'édition 1973 des *Études des statistiques sur le travail* (72—207), parue en mars 1975,

comprend cinq articles sur des sujets tels les sources de biais dans les estimations des mou-

vements bruts, les réserves des caisses de pensions privées, et, dans le programme d'études

sur la main-d'oeuvre, deux articles sont parus: "Variations à court terme dans le taux d'activité

des étudiants et des non-étudiants de 1966 à 1973" et "Mères au travail au Canada".

*CANSIM voir la note à la page 13

Statistique générale

La Direction de la statistique générale est chargée des statistiques sur les prix, le travail, les finances des entreprises et le commerce extérieur.

Division du commerce extérieur

La Division du commerce extérieur s'est acquittée de son rôle premier qui est de faire rapport sur le commerce des marchandises du Canada avec les autres pays. Quoique les documents des importateurs et les déclarations des exportateurs à Revenu Canada constituent la source principale de renseignements, plusieurs grands importateurs et exportateurs envoient directement à Statistique Canada des rapports supplémentaires sur leurs opérations.

La division du commerce extérieur se fie surtout à Douanes et accise de Revenu Canada pour obtenir des renseignements complets sur la nature des opérations commerciales. Elle a fourni à Revenu Canada des données spécialisées à la classification qui ont vérifié l'exactitude du codage des déclarations des importateurs et de leurs agents. Ces commis ont été affectés aux neuf ports douaniers canadiens où sont faites la grande majorité des déclarations à l'importation.

La division a également participé à l'analyse des données sur le commerce des marchandises; ses recherches sur les moyens de mesurer les variations de prix et de volume des exportations et des importations ont fait l'objet d'une Nations-Unies pour les statisticiens européens. Un autre rapport sur la mesure des incohérences dans les données du commerce bilatéral, rédigé en collaboration avec le U.S. Bureau of the Census, a été soumis à la 18^e session de la Commission statistique des Nations-Unies.

La Division du commerce extérieur a continué de collaborer avec le U.S. Bureau of the Census dans un programme destiné à rapprocher les statistiques commerciales des produits maintenant des estimations annuelles conclues dans les quatre mois qui suivent la fin de l'année et des estimations de données trimestrielles conciliées.

La division a beaucoup mis sur les systèmes informatiques, le centre nerveux de son activité des quatre dernières années, ce qui lui permet maintenant de produire un plus grand éventail de données sur le commerce extérieur et de répondre beaucoup plus rapidement aux demandes imprévues. Par exemple, elle a joué un rôle important dans l'organisation et la production des statistiques commerciales ventilées selon le tarif douanier qui paraissent dans l'exposé du Canada en vue des prochaines négociations du G.A.T.T.; elle a aussi développé ses réserves de données ventilées par province à l'intention des analystes des administrations provinciales intéressées à l'origine et à la destination par région du commerce extérieur du Canada. La capacité d'alimenter directement

les utilisateurs du secteur privé s'est multipliée de façon considérable, particulièrement sous forme de données enregistrées sur bandes magnétiques.

Dans son programme d'expansion de ses publications, la Division du commerce extérieur a offert à ses utilisateurs un système de micro-fiches qui comprend maintenant les rapports statistiques mensuels, trimestriels et annuels.

Division des prix

La Division des prix collecte, réunit et compile des données sur les prix à tous les niveaux de l'activité économique. On y trouve des exportateurs et les autres pays; les prix industriels, qui se rapportent à la production et à la distribution des marchandises et des services, et les prix agricoles; la recherche et le développement, qui coordonnent la recherche et l'analyse dans des domaines touchant les prix au détail et industriels.

Le programme d'actualisation de l'indice des prix à la consommation est achevé avec l'indice de nouveaux coefficients de pondération tenant compte des régimes de dépenses des familles de 1967. La publication du nouvel indice pondéré a commencé en mai 1973.

En janvier 1975, la division a publié une nouvelle série de totalisations provisoires qui brosent un tableau plus vaste et plus actuel des variations de prix au détail. Au moment de la publication de l'indice des prix à la consommation, on compte maintenant, plus de quatre fois le nombre d'indices particuliers fournis également, apparemment les changements dans l'indice des prix à la consommation après désaisonnalisation.

Avec la parution des indices urbains en janvier 1975, la ventilation pour chaque ville a quadruplé pour atteindre environ 30 éléments. En novembre 1974, a paru la publication d'indices mensuels distincts remontant à avril 1973, pour Saskatoon, Regina, Edmonton et Calgary, et, à compter de septembre 1974, paraîtront des schémas de pondération détaillés de l'indice urbain des prix à la consommation. La division terminera l'élaboration d'un indice pour Charlottetown et pour l'Île-du-Prince-Édouard.

La Division a fait paraître: — une enquête élargie sur les supermarchés, entreprise en octobre 1974 afin de mesurer le moyennage des prix sur 56 articles semblables dans 14 villes; — les cinq premiers éléments dans une série d'études comparatives d'indices de prix à la consommation d'un endroit à un autre en fonction de chacun des éléments; — des indices de prix mensuels pour les

nouvelles maisons unifamiliales dans six régions métropolitaines.

— des indices sur l'acier ouvré mis en place et le béton préarmé.

A l'appui du système d'indemnisation des employés fédéraux, la division a entrepris 48 enquêtes complètes et huit enquêtes abrégées sur les prix au détail et le coût de la vie, aux fins des indemnités de service à l'étranger et, après enquête, a produit des indices pour 72 postes isolés.

Depuis janvier 1975, elle publie tous les mois les indices des prix des nouvelles maisons unifamiliales dans six régions métropolitaines: Vancouver, Ottawa-Hull, Winnipeg, Montréal, Toronto, et Edmonton. Les enquêtes doivent s'étendre à d'autres villes du pays.

La division a poursuivi la mise sur pied d'un système d'indices de prix de vente des entrepre-neurs; fait des démarches en vue de la production d'une série intégrée d'indice de prix dans le secteur des transports; entrepris une révision complète de l'indice des prix des valeurs mobilières avec 1971 comme référence et pondération; continué de mettre sur pied une série améliorée d'indices des prix de l'énergie; révisé les indices de prix de vente des industries avec un champ d'observation plus étendu, un traitement informatisé, de nouvelles pondérations et 1971 comme période de référence; poursuivi l'intégration des prix des industries dans le cadre des tableaux entrées-sorties; entrepris des recherches sur les relevés de prix des exportations en vue d'obtenir de nouveaux indices qui complètent les indices de valeurs unitaires qui proviennent actuellement des données sur les finances et les effectifs des données sur les statistiques sur l'appartenance et le contrôle des sociétés, en conformité de la Loi sur les déclarations des corporations et des syndicats ouvriers (CALUORA).

En 1974-75, l'enquête trimestrielle des sociétés industrielles a été élargie et améliorée, et la tâche des répondants a été facilitée par l'intégration de l'enquête sur les dépenses d'investissements et celle sur les états financiers des sociétés industrielles. Tous les questionnaires ont été remaniés (sauf ceux envoyés aux exploitants immobiliers et aux locataires) ainsi que les guides de déclaration à l'intention des répondants.

La taille de l'échantillon des exploitants immobiliers et locataires est doublée pour élargir le champ d'enquête et changer la présentation de la publication pour la rendre plus compatible avec le caractère exhaustif du

*CANSIM voir la note à la page 13

et les prix qu'ils ont touchés, ainsi que des données sur la mouture et le broyage des oléagineux.

Les données provenant de ces enquêtes et d'autres sources viennent appuyer des études permanentes sur les approvisionnement, les fourrages et les oléagineux au Canada. Une série de rapports agricoles sur le commerce international des céréales et des oléagineux est réalisée grâce à la collaboration du Service des délégués commerciaux du Canada.

La Section du bétail et des produits d'origine animale communique des renseignements sur l'industrie de l'élevage au Canada. La section s'intéresse au cours de l'année son analyse des résultats de l'enquête exhaustive sur l'agriculture en ce qui concerne le bétail, de façon à améliorer l'interprétation des indications fournies par l'échantillon. L'emploi intégral de ces indications est prévu pour juillet 1975.

Une autre méthode d'estimer la production totale de lait à partir des achats des laitières est actuellement utilisée.

L'enquête-pilote sur les porcs en Ontario a été modifiée au cours de l'année en utilisant les données fournies par le recensement de l'agriculture et par l'Ontario Pork Producers Marketing Board.

Dans le but de produire des statistiques plus significatives sans dédoublement d'efforts ni imposition de fardeaux supplémentaires aux producteurs de volailles, on a procédé à des consultations auprès d'associations provinciales de producteurs d'œufs, de l'Office canadien de commercialisation des œufs et du Conseil de commercialisation des produits alimentaires. Ce travail se poursuivra l'an prochain.

Division des industries manufacturières et primaires

Au cours de l'année, les activités de la division ont porté principalement sur une consultation beaucoup plus grande avec l'administration publique et l'industrie, l'affermissement et l'extension de son programme d'automatisation sur une modeste expansion dans les études analytiques spéciales.

L'évolution rapide de la situation tant internationale qu'intérieure, en ce qui concerne notamment l'énergie, l'environnement et la position concurrentielle du Canada dans le commerce des produits manufacturés a créé une demande croissante d'études spéciales et d'accords de collaboration à la collecte et l'analyse des données. La participation du Canada à l'Accord international sur l'énergie a intensifié le besoin d'une statistique coordonnée de l'énergie, besoin qui influera sur l'établissement du programme des statistiques sur l'énergie pour l'année qui vient. Dans le secteur manufacturier, tous les aspects du recensement des manufactures ont été consultés d'avantage sur les provinces afin de tirer tous les avantages possibles entrainés par l'élimination du doublement dans la collecte et l'automatisation de données.

Division des transports et des communications

La Division enquête auprès de l'industrie des transports et des communications, des mouvements des marchandises et des personnes, et des infrastructures connexes. Par des rapports exhaustifs et des publications, elle fournit des renseignements à ses utilisateurs, particulièrement les organismes administratifs et législatifs de l'administration publique.

Un comité interministériel de la statistique maritime formé en août 1973 pour établir des directives en vue d'élaborer un nouveau système de statistiques sur le transport par eau a présenté son rapport en juin 1974. Il a précisé les besoins des utilisateurs dans les six principaux domaines de l'information: l'exploitation du navire, le déplacement des cargaisons, l'immatriculation des navires, l'activité portuaire, la méthode utilisée pour achever le déplacement à l'intérieur du pays et les statistiques financières.

Le rapport a proposé l'établissement d'une nouvelle base de données industrielles qui répondrait aux besoins de tous les utilisateurs, spécialement ceux de l'administration publique. Une nouvelle enquête a tenté de délimiter la nature et l'étendue d'un champ d'observation élargi par suite d'une recommandation voulant un relevé plus exhaustif du transport par eau au Canada.

Cette année, la division a terminé un projet semblable, entrepris il y a trois ans dans le domaine du transport routier. Par conséquent, des nouvelles questionnaires sur l'industrie de transport par véhicule automobile, dans le cadre d'un important programme de réévaluation, ont été envoyés à 28 000 enquêtes. Les résultats provisoires indiquent une réponse qui a dépassé toute attente.

Division du commerce et des services

L'enquête sur le transport routier de marchandises pour compte d'autrui et en location, que l'on croit la plus exhaustive au monde sur le déplacement des marchandises par véhicules automobiles, en est à sa cinquième année. L'application de nouvelles méthodes d'échantillonnage pour 1974 a permis de réduire de 40 % la taille de l'échantillon et d'augmenter considérablement les frais des régions tout en conservant la comparabilité des données avec celles des années précédentes. On a également retenu la méthodologie unique, qui consiste à relever des renseignements directement des dossiers des répondants. L'enquête est considérée maintenant comme permanente.

La formule "Longueur des voies publiques", (l'ancienne "Road and Street Mileage Report"), était la première formule de la division qui donnait aux répondants l'opportunité de répondre au choix selon le système métrique. Une enquête auprès des maisons d'expédition, faite pour le compte de la Commission canadienne des transports, et une enquête sur les accidents en bateau de plaisance, à la demande de la Direction de la sécurité maritime de Transports Canada, ont exploré des domaines jusqu'alors inconnus de la statistique sur le transport.

Analyses des services de distribution Cette section, chargée d'études de marché et d'analyses diverses, a commencé la rédaction d'un guide pour études de marché, prépare une étude sur les centres commerciaux et met à jour la publication "*Trends in Canadian Marketing*".

Recensement du commerce et des services Le traitement et l'analyse des données obtenues du recensement du commerce et des services sont poursuivis pendant l'année. Cette analyse préliminaire a identifié certaines faiblesses des données et a permis de mieux prendre conscience du travail qui reste à faire avant la publication.

Commerce de détail En janvier 1975, la section du commerce de détail a commencé la publication de données tirées d'un nouvel échantillon et portant sur des estimations mensuelles pour 10 groupes commerciaux additionnels, des estimations commerciales mensuelles pour Montréal, Toronto, Winnipeg et Vancouver et une

Entreprises

Le secteur "Entreprises" est chargé de la collecte, du traitement et de la publication des données relevées auprès des entreprises. Le secteur compte deux directions générales: la statistique industrielle et la Statistique générale.

Les informations recueillies par le secteur "Entreprises" représentent un grand apport statistique aux Comptes nationaux et constituent une mine de renseignements sur tous les aspects de l'activité commerciale au pays.

Division des

profils et des

registres d'entreprises

La Division des profils et des registres d'entreprises, les profils et l'accès aux dossiers fiscaux.

Registres d'entreprises

En 1974-75, la sous-division s'est efforcée d'intégrer les activités des trois sous-divisions; ce programme se poursuivra au cours de 1975-76. Elle a chargé du registre d'entreprises de Statistique Canada entre en vigueur au début de 1972. Le registre fait le relevé de tous les employeurs au Canada, constitués ou non en société, et il sera élargi pour comprendre les sociétés qui ne sont pas employeurs.

Les systèmes de fichier principal de la division qui, conjointement avec le registre des entreprises, fournissent un apport direct aux enquêtes ont été mis en oeuvre en partie dans la division du Travail, sont en voie d'élaboration dans la division de la Construction et aux premiers stades de mise en application dans les divisions suivantes: Finances des entreprises, Transports et communications et Commerce et services.

Le système informatique du registre des entreprises est remanié pour faciliter l'utilisation des moyens modernes de renouvellement du fichier de bases. Cette nouvelle technique est mise à l'épreuve tout en poursuivant les méthodes actuelles de renouvellement.

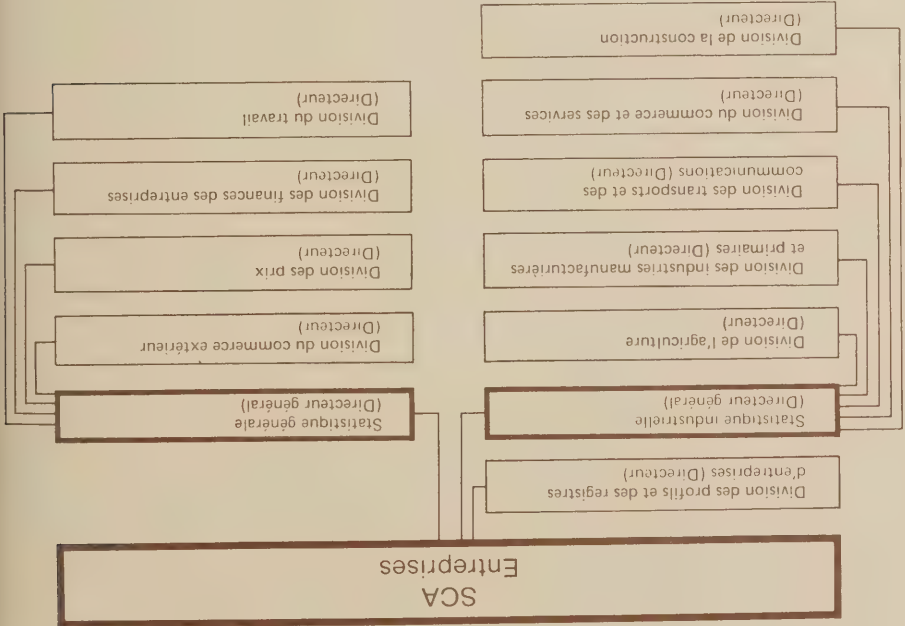
Profils

Tout en continuant de fournir des profils au

secteur "Entreprises", cette sous-division entreprend une étude approfondie sur l'introduction de méthodes systématiques dans la définition de profils. Par définition, les "profils" consistent à délimiter et enregistrer une structure de déclaration pour une enquête ou groupe d'enquêtes du bureau. A cette fin, la sous-division procède plus efficace et appliquée un système informatique en vue d'obtenir une façon de sous-division sera plus en mesure de fournir aux divisions enquêtes les structures de déclaration complètes, actuelles et précises dont elles ont besoin.

Accès aux dossiers fiscaux

L'année dernière, la sous-division de l'accès aux dossiers fiscaux a élaboré et mis sur pied les systèmes et les méthodes d'exploitation des



documents fiscaux pour compléter ou remplacer les données obtenues autrement. Les données fiscales sur les entreprises sont accessibles sous une forme commode pour les divisions enquêtes, cela allège donc la tâche des répondants. A court terme, elle fait porter les efforts sur les domaines de la fabrication, de la construction et des transports; et, à plus long terme, elle vise à dresser une liste d'entreprises et à mettre les données fiscales à la disposition du recensement du commerce et des services de 1981.

Statistique

industrielle

La Direction de la statistique industrielle est chargée des statistiques sur l'agriculture, les industries manufacturières et primaires, les transports et les communications, le commerce et les services, et la construction.

Division de

l'agriculture

La Division de l'agriculture est chargée de la collecte, de l'évaluation et de la publication des données sur l'industrie agricole. Son programme est réalisé en collaboration avec les ministères et organismes fédéraux, notamment Agriculture Canada, et les ministères provinciaux par la participation à certaines enquêtes et en vertu d'autres arrangements.

L'élaboration d'une enquête exhaustive par sondage, amorcée en 1972 pour remplacer les bases quinquennales par des bases annuelles dans les estimations statistiques produites à partir des données obtenues par enquête postale, se poursuit toujours. L'enquête recueille des données auprès de 8,000 fermes (9,000 en 1976) et devrait être en exploitation en 1976. Un essai complet des cartes préliminaires et du rappel devant être utilisées lors des enquêtes

*CANSIM voir la note à la page 13

Direction de la politique, de la planification et de l'évaluation

La Direction de la politique, de la planification et de l'évaluation conseille le Statisticien en chef du Canada au sujet des politiques concernant l'ensemble de Statistique Canada et dépassant le cadre de compétence des différentes sous-sections organisationnelles. Ces questions comprennent les objectifs, les priorités en matière de programmes et le rôle de Statistique Canada à l'intérieur du système statistique national, et ses relations avec les autres éléments du système. La direction comprend trois divisions:

Division de la

planification stratégique

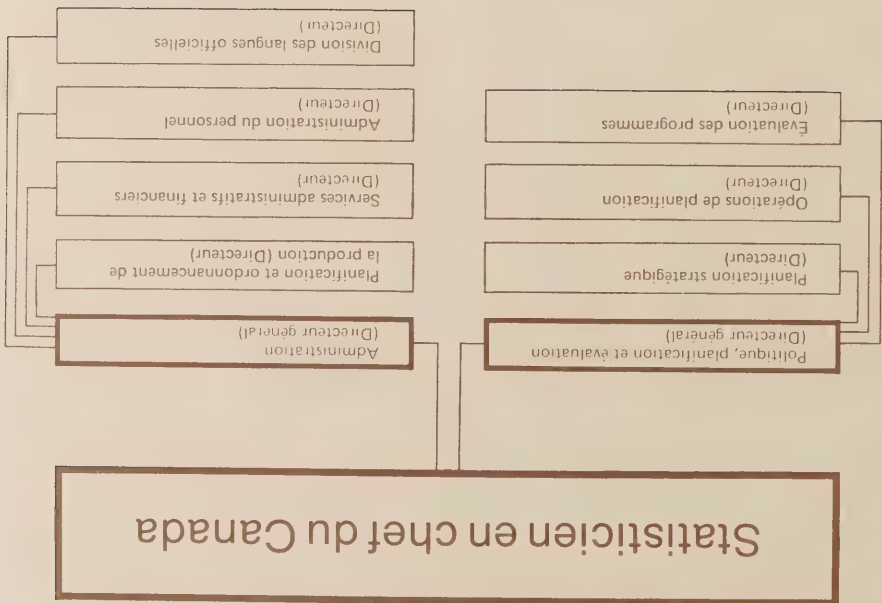
La Division de la planification stratégique coordonne l'élaboration des objectifs par secteurs et donne des conseils au sujet de leur intégration dans les objectifs d'ensemble de Statistique Canada. Elle aide à l'élaboration des plans de programmes et donne des conseils au sujet de leur mise en oeuvre. Au cours de 1974-75, les efforts de la division ont porté surtout sur les programmes de statistiques sociales y compris la planification pour le recensement de 1981.

Division de la planification

La Division de la planification est chargée de traduire les plans dans des propositions opérationnelles précises aux fins des prévisions annuelles des programmes de Statistique Canada. Elle dirige le système d'information de la gestion axé sur les projets, et l'utilise pour contrôler l'utilisation des ressources affectées aux programmes. Au cours de 1974-75, la division a fait un examen en profondeur de ce système.

Division de l'évaluation des programmes

La Division de l'évaluation des programmes est chargée d'évaluer l'efficacité et la pertinence de tous les aspects des programmes de Statistique Canada. Au cours de l'année financière, elle a commencé l'élaboration d'un système de mesure du rendement opérationnel.



L'honorable Don Jamieson
Ministre de l'Industrie et du Commerce,
Ottawa, Ont.

Monsieur le Ministre,
J'ai bien le plaisir de vous présenter le rapport
annuel de l'activité et des services de Statistique
Canada au cours de l'année financière qui
s'est terminée le 31 mars 1975.
Recevez, Monsieur le Ministre, l'assurance
de ma très haute considération.

Peter G. Kirkham
Statisticien en chef du Canada

15 Division de la coordination des enquêtes spéciales

Institutions et finances publiques

Division des finances publiques

Division de l'éducation, des sciences et de la culture

16

Division de la santé

Division de la statistique judiciaire

18 Services statistiques

Division de l'élaboration d'enquêtes "Ménages"

Division des méthodes d'enquêtes "Entreprises"

19 Méthodes de recensement et d'enquêtes "Institutions"

Division des opérations régionales

20 Direction des systèmes informatiques et du traitement des données

Division des systèmes informatiques

Division du traitement des données

21 Division des systèmes généraux d'enquêtes

Division de la vérification, de la planification et de la recherche en automatisation

22 Services de diffusion et de promotion

Services d'information

Bibliothèque de Statistique Canada

Division de l'assistance-utilisateurs

23 Recensement

Division des études et de la statistique démographiques

Relations avec les utilisateurs

Direction du contenu et de l'analyse

Division de la planification à long terme du recensement

24

Division des estimations et des projections démographiques

Division des caractéristiques du recensement

Division du recensement de l'agriculture

Direction de la production du recensement

Division de la saisie des données

25

Division de la diffusion des données

Division de l'exploitation

5	Direction de la politique, de la planification et de l'évaluation	
	Division de la planification stratégique	
	Division de la planification	
	Division de l'évaluation des programmes	
6	Entreprises	
	Division des profils et des registres d'entreprises	
	Statistique industrielle	
	Division de l'agriculture	
7	Division des industries manufacturières et primaires	
	Division des transports et des communications	
	Division du commerce et des services	
8	Division de la construction	
9	Statistique générale	
	Division du commerce extérieur	
	Division des prix	
	Division des finances des entreprises	
10	Division du travail	
11	Comptes économiques et intégration	
	Coordonnateur de la statistique financière	
	Conseiller supérieur en intégration	
	Système des comptes nationaux (structurels)	
	Division des normes	
	Division des entrées-sorties	
	Division de la recherche et du développement en statistiques urbaines et régionales	
12	Division de l'analyse structurelle et recherche en productivité	
	Systèmes des comptes nationaux (courants)	
	Division du produit national brut	
	Division de la balance des paiements	
	Division du produit industriel	
	Division des flux financiers et des entreprises multinationales	
13	Division des analyses de conjoncture	
14	Ménages et institutions	
	Statistique des ménages	
	Division de l'enquête sur la population active	
	Division du revenu et des dépenses des consommateurs	

Rapport annuel
1974 - 1975
de Statistique Canada
Année financière close le 31 mars
1-0000-502
Catalogue 11-201
Statistique Canada
Ottawa



Rapport annuel 1974-1975 de Statistique Canada



Statistique
Canada

Statistics
Canada

Rapport annuel 1975-1976 du Statistique Canada



**Rapport annuel
1975-1976
de Statistique Canada**

Année financière close le 31 mars

1-0000-502
Catalogue 11-201
Statistique Canada
Ottawa

Document
Publications

Table des matières

5 Direction de la politique, de la planification et de l'évaluation

Division de la planification stratégique

Division des opérations de planification

Division de l'évaluation des programmes

Administration

Promotion de la femme

Division des langues officielles

Relations internationales

6 Entreprises

Division des profils et des registres d'entreprises

Direction de la statistique industrielle

Division de l'agriculture

Division des industries manufacturières et primaires

7 Division des transports et des communications

Division du commerce et des services

Division de la construction

Direction de la statistique générale

Division du commerce extérieur

Division des prix

8 Division des finances des entreprises

Division du travail

9 Comptes économiques et intégration

Coordonnateur de la statistique financière

Conseiller supérieur en intégration

Système des comptes nationaux (structurels)

Division des normes

Division des entrées-sorties

Division de la recherche et du développement en statistiques urbaines et régionales

10 Division de l'analyse structurelle

Système des comptes nationaux (courants)

Division du produit national brut

Division de la balance des paiements

Division du produit industriel

Division des flux financiers et des entreprises multinationales

Division des analyses de conjonctures

11 Ménages et institutions

Direction générale de la statistique des ménages

Division de l'enquête sur la population active

Division du revenu et des dépenses des consommateurs

Division de la coordination des enquêtes spéciales

12 Direction générale de la statistique des institutions et des finances publiques

Division des finances publiques

Division de l'éducation, des sciences et de la culture

Division de la santé

Division de la statistique judiciaire

13 Services statistiques

Division de l'élaboration d'enquêtes "ménages"

Division des méthodes d'enquêtes "entreprises"

Division des méthodes d'enquêtes "institutions et agriculture"

Division des méthodes d'enquêtes "recensement"

Division des opérations régionales

14 Direction générale des systèmes informatiques et du traitement des données

Division des systèmes informatiques

Division du traitement des données

Division des systèmes généraux d'enquêtes

Division de la vérification, planification et recherche en automatisation

15 Services de diffusion et de promotion

Division de l'information

Division de l'assistance-utilisateurs

Bibliothèque de Statistique Canada

16 Recensement

Division des études et statistiques démographiques

Relations avec les utilisateurs du recensement

Direction du contenu et de l'analyse

Division de la planification à long terme

Division des estimations et projections démographiques

Division des caractéristiques du recensement

17 Division du recensement de l'agriculture

Direction de la production

Division de la saisie des données

Division de la diffusion des données

L'exploitation du recensement

L'honorable Don Jamieson
Ministre de l'Industrie et du Commerce,
Ottawa, Ontario.

Monsieur le Ministre,
J'ai bien le plaisir de vous présenter le rapport
annuel de l'activité et des services de Statistique
Canada au cours de l'année financière qui
s'est terminée le 31 mars 1976.

Recevez, Monsieur le Ministre, l'assurance
de ma très haute considération

Peter G. Kirkham
Statisticien en chef du Canada

Direction de la politique, de la planification et de l'évaluation

La direction a pour tâche de conseiller le Statisticien en chef au sujet de la planification et de l'évaluation des programmes ainsi que des politiques qui dépassent le cadre de compétence des secteurs et directions particuliers. Ces conseils peuvent porter sur la répartition des priorités en matière de programmes, l'élaboration des objectifs du Bureau, le rôle de ce dernier à l'intérieur du système statistique national et les relations de Statistique Canada avec d'autres organismes qui font partie de ce système. La direction regroupe trois divisions.

Division de la planification stratégique

La Division de la planification stratégique coordonne l'élaboration des objectifs par secteurs et assure l'intégration des efforts dans le cadre des objectifs d'ensemble. Elle aide à l'élaboration des plans de programmes et donne des conseils relativement à leur mise en oeuvre.

Division des opérations de planification

Cette division est chargée de traduire les plans dans des propositions opérationnelles précises. Elle dirige le système d'information de la gestion, le système de comptabilité analytique et de surveillance de la gestion, qui contrôle les ressources en temps et en main-d'oeuvre consacrées aux projets. La division révisé et coordonne périodiquement les besoins immédiats et à moyen terme du Bureau aux fins des prévisions annuelles des programmes. Elle enregistre également tous les procès-verbaux des comités internes et externes.

Division de l'évaluation des programmes

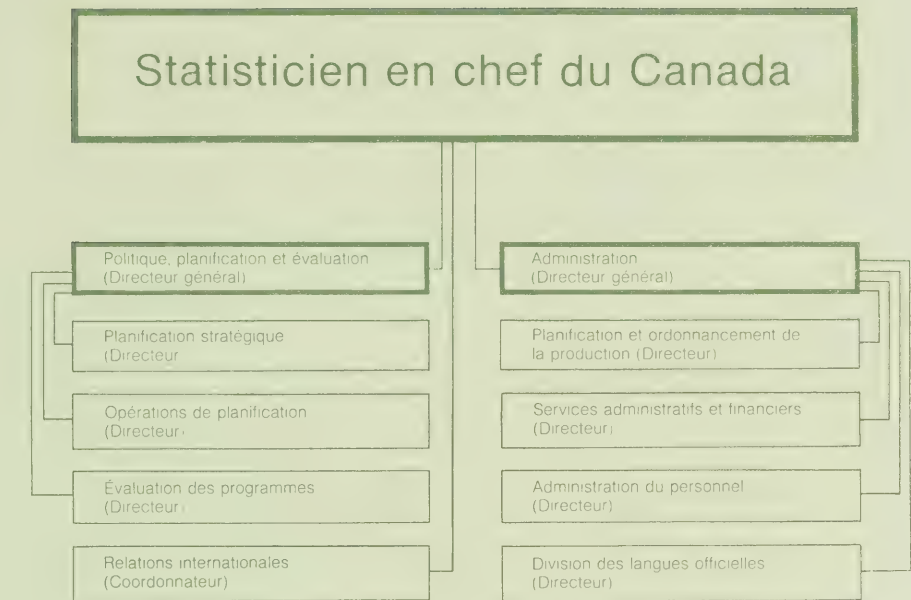
Cette division est chargée d'évaluer l'efficacité et la pertinence de tous les aspects des programmes de Statistique Canada. Elle a continué, en 1975-1976, à travailler à la mise en oeuvre d'un système de mesure du rendement opérationnel.

Administration

Promotion de la femme

Le Comité de promotion de la femme, établi à l'automne 1974, se compose de représentants et suppléants de tous les secteurs relevant du Statisticien en chef. Depuis janvier 1975, Action, bulletin d'une seule page, expose tous les mois les activités de ce comité à l'intention des employées de Statistique Canada.

À la fin juin 1975, des diapositives groupées sous le titre "À vous de choisir" et une discussion sur les moyens de formation mis à leur disposition, tant à l'extérieur qu'à l'intérieur du Bureau, furent offertes



à toutes les employées de la région d'Ottawa.

En mars 1976, le Statisticien en chef annonçait la création d'un comité directeur ayant pour but d'assurer d'autres mesures de promotion de la femme et d'élaborer les buts à atteindre et les façons de mesurer les progrès réalisés selon un plan annuel et un plan quinquennal.

Division des langues officielles

Cette division a poursuivi son travail touchant l'identification des exigences linguistiques des postes et l'augmentation des capacités en bilinguisme du personnel. Au mois d'avril 1975, le nombre des employés bilingues de Statistique Canada était passé de 839, qu'il était en février 1972, à 1,636 (soit de 23,3% en 1972 à 36,5% du nombre total des employés).

Un groupe de travail est établi qui est chargé d'identifier les unités devant travailler en français, aussi d'informer les gestionnaires et les employés touchant les principes directeurs régissant la langue de travail, et de préparer un inventaire des instruments de travail encore disponibles seulement dans une langue.

Quant au recensement 1976, la division s'est préoccupée de la formation des gestionnaires, commissaires et représentants; de la préparation de pochettes de presse à l'intention du public; de l'identification des secteurs du recensement requérant des services dans les deux langues officielles; et aussi de l'embauche des personnes ayant les capacités linguistiques nécessaires aux besoins reconnus et identifiés.

Relations internationales

Statistique Canada a continué de collaborer avec les unités statistiques des organismes internationaux dont le Canada est membre en fournissant des données canadiennes et participant à l'élaboration de normes statistiques internationales et de programmes de travail. Parmi les réunions les plus importantes sur la statistique tenues en 1975-1976, mentionnons la huitième Conférence des statisticiens du Commonwealth, la vingt-troisième réunion plénière de la Conférence des statisticiens européens, la douzième réunion du Comité pour l'amélioration des statistiques nationales de l'Institut interaméricain de statistique et la quarantième séance de l'Institut international de statistique. Statistique Canada a participé activement à ces réunions et à un certain nombre de réunions techniques relatives à certains aspects statistiques de plusieurs questions particulières. Ces réunions ont apporté des avantages réciproques à tous les pays participants.

Statistique Canada a également entretenu des contacts bilatéraux avec les organismes statistiques de pays étrangers lorsque cette collaboration était profitable à l'une comme à l'autre des parties concernées.

Entreprises

Ce secteur fait la collecte, le traitement et la publication des données relevées auprès des entreprises. Il compte deux directions générales: la Statistique industrielle et la Statistique générale. La Direction de la statistique industrielle est chargée de la statistique de l'agriculture, des industries manufacturières et primaires, des transports et des services et de la construction. La Direction de la statistique générale est chargée de la statistique du commerce extérieur, des prix, des finances des entreprises et du travail.

De plus, la Division des profils et des registres d'entreprises fait partie de ce secteur. Elle se charge principalement de tenir une liste détaillée de toutes les sociétés et établissements de commerce enquêtés par le Bureau.

Les informations recueillies par ce secteur représentent un grand apport statistique aux comptes nationaux et constituent une mine de renseignements sur tous les aspects de l'activité commerciale au pays.

La Division des profils et des registres d'entreprises

La division compte trois sous-divisions, soit celles des registres d'entreprises, des profils et de l'accès aux dossiers fiscaux. À la fin de l'année financière 1975-1976, les efforts pour intégrer les activités de la division se sont traduits par la fusion d'une partie de la Sous-division des profils avec la Sous-division des registres d'entreprises et l'affectation du reste du personnel de la Sous-division des profils à un groupe de travail sur l'intégration de la statistique économique.

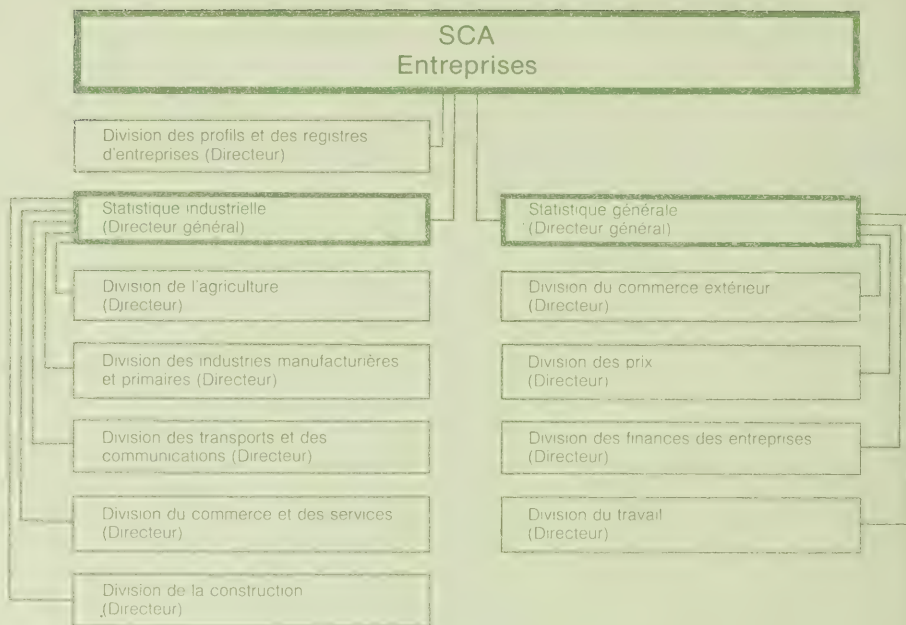
Registres des entreprises

Les travaux d'élargissement des registres des entreprises afin d'inclure les sociétés qui ne sont pas employeurs ainsi que tous les employeurs sont pratiquement terminés. Des systèmes de fichier principal de divisions ont été élaborés dans plusieurs divisions et un travail considérable a été fait en vue d'apparier les listes des divisions aux registres des entreprises. Ce travail continuera à un rythme accéléré durant 1976-1977.

Les systèmes informatiques ont été améliorés et vers la fin de l'année, on procédait à des tests avancés sur le système en mode conversationnel. On a mis sur pied un appareil de mise à jour du mode; les travaux doivent se poursuivre au cours de l'année prochaine.

Profils

Les travaux visant à identifier les structures des déclarations statistiques et les structures d'unités auxiliaires des établissements des principaux commerces et à résoudre le problème de déclaration des commerces multi-industriels se sont poursuivis. On a élaboré, testé et appliqué des méthodes systématiques d'études de profils en vue des enquêtes sur la statistique de la population active



(postes vacants, rémunérations de l'emploi, revenu du travail et profession des salariés) et cette activité se poursuivra en 1976-1977.

Accès aux dossiers fiscaux

La sous-division a continué de recueillir les données des documents fiscaux pour compléter ou remplacer les données obtenues autrement. Toutes les entreprises non constituées en société dont les ventes brutes dépassaient \$50,000 ont été identifiées et classées, et ce, afin d'améliorer la qualité des listes d'enquêtes et d'alléger la tâche des répondants en utilisant les données fiscales pour remplacer les questionnaires envoyés par la poste et destinés aux domaines de la fabrication, de la construction et des transports.

Une planification exhaustive a été faite et certains travaux ont été exécutés en vue de dresser une liste d'entreprises non constituées sans salariés; cette liste sera utilisée pour le recensement du commerce et des services de 1981 à l'occasion duquel on espère utiliser les données fiscales pour alléger de façon appréciable la tâche des répondants.

La Direction de la statistique industrielle

La Division de l'agriculture

Au cours de l'année, la division a planifié une enquête-pilote sur les dépenses des exploitations agricoles dans l'ouest du Canada; cette enquête sera entreprise vers la fin de 1975-1976 et au début de 1976-

1977. C'est la première étape de l'élaboration d'un système statistique destiné à compléter la Loi sur la stabilisation du revenu des producteurs de céréales de l'ouest.

Elle a produit des estimations sur la production de lait d'après des renseignements sur les quantités achetées aux fermiers par les premiers destinataires plutôt que par une conversion à leur équivalent en lait de divers produits laitiers, tels que beurre et fromage. Un comité directeur interministériel a été formé pour formuler des estimations de la production d'oeufs en utilisant les données communiquées par l'Office canadien de commercialisation des oeufs.

La Division des industries manufacturières et primaires

À la suite d'ententes conclues récemment sur l'utilisation de données fiscales plutôt que d'enquêtes directes, la division signale que quelque 18,000 petits commerces n'auront pas à faire de déclarations lors du recensement de 1976 et des recensements futurs des manufactures et des forêts. Les progrès réalisés dans l'informatisation du traitement des données de ces deux recensements se traduisent par une réduction appréciable du délai de production des déclarations individuelles de l'industrie de 1974. Quant aux recensements de 1975, on s'attend à ce que la date de publication soit avancée d'environ deux mois.

On a préparé une nouvelle enquête trimestrielle sur la conjoncture et les prévisions dans le secteur canadien des industries manufacturières. Elle a été bien accueillie par le monde des affaires.

On a publié une étude détaillée sur les établissements manufacturiers sous contrôle étranger et domestique au Canada entreprise en collaboration avec la Division des finances des entreprises.

La Division des transports et des communications

La division a entrepris une étude-pilote du port de Vancouver pour évaluer la possibilité de recueillir des statistiques sur le transport maritime en utilisant des documents des douanes, liant ainsi les statistiques des transports et du commerce.

Dans la région Atlantique, l'analyse de la documentation d'un important transporteur par eau, en collaboration avec le Service des méthodes d'enquêtes auprès des entreprises et Transports Canada, a fait ressortir des remplacements possibles à la publication maritime habituelle. Une enquête spéciale sur l'industrie du transport par eau a été entreprise pour obtenir une base solide en vue des enquêtes futures.

On a mené une enquête pour le compte de la Commission canadienne des transports et de concert avec elle auprès des principaux transporteurs aériens sur la consommation de carburant et son prix.

Les enquêtes auprès des entrepreneurs en camionnage ont été reprises. Des estimations révisées en vue d'une enquête sur le camionnage pour compte d'autrui et la location ont été publiées.

La Division du commerce et des services

Le programme des enquêtes de la division dans les secteurs du commerce de détail, de gros et des services rend compte de plusieurs importantes réalisations au cours de l'année.

Les données révisées du commerce de détail pour 1972 à 1974, fondées sur le remaniement de l'échantillon mensuel, ont été publiées en juin 1975. Le rapport sur les centres commerciaux de 1973 comportait une nouvelle section sur les galeries marchandes et donnait des renseignements sur la surface couverte des magasins et la superficie des parcs de stationnement. On a terminé l'enquête 1974 sur les marchandises vendues au détail.

Dans le cas du commerce de gros, un nouveau programme de recensement annuel, portant sur les commerçants de gros une année et les agents et courtiers l'année suivante, a été mis sur pied. On a entamé la planification d'une nouvelle enquête mensuelle par sondage sur les commerçants de gros, qui doit être exécutée en avril 1977.

Deux nouvelles publications portent sur les services non commerciaux, et une nouvelle enquête sur les services des ingénieurs-conseils a été inaugurée. On a entrepris une extension de l'enquête mensuelle sur les restaurants qui couvrira

tout le secteur de la restauration à compter de juillet 1977. Le *Manuel statistique pour études de marché*, édition 1975, est paru, et on a fait une étude exhaustive des centres commerciaux au Canada, 1950 à 1973.

La Division de la construction

La division offre un vaste choix de renseignements détaillés sur les logements et les permis de bâtir, l'industrie de la construction, les investissements publics et privés au Canada, ainsi que sur le patrimoine national et les stocks de capital.

On travaille à l'établissement d'un fichier principal sur les projets de construction non résidentielle pour enregistrer des données sur approximativement 25,000 projets de construction en cours dans les secteurs industriel, commercial et public. En même temps, on met au point des systèmes de conversion de ces renseignements pour produire des estimations trimestrielles sur la construction non résidentielle en cours et estimer la valeur du travail sur les constructions qui est reportée d'une période à l'autre.

On a pu procéder au programme des recensements annuels dans l'industrie de la construction à l'exception des entrepreneurs généraux en génie civil. On a amorcé des travaux de recherches sur l'utilisation de données fiscales qui permettrait une plus grande utilisation de l'échantillonnage, en vue de réduire le fardeau des répondants et les dépenses. Les besoins des provinces en matière de renseignements plus détaillés sur les investissements par région et activité expliquent la conclusion des accords d'enquêtes conjointes avec les provinces de Québec et de la Saskatchewan en vue de la collecte de données sur les dépenses d'immobilisation et de réparation.

La Direction de la statistique générale

La Division du commerce extérieur

Au cours de l'année, la division a mis en oeuvre un meilleur système pour recueillir des renseignements à partir des déclarations douanières pour les importations. Elle a établi un système de codage et ouvert un dossier statistique sur des sujets tels que le pays d'origine, le produit et le genre de transport utilisé. Ce dossier intéressera les personnes utilisant les données dans ce domaine.

La publication provisoire sur la statistique du commerce extérieur a été améliorée par la rectification de la valeur totale des exportations et des importations en vue de la rendre compatible avec la statistique du commerce des produits

figurant dans la balance des paiements.

Les principales publications sur la statistique du commerce de la division sont disponibles sur microfiche et sur ruban, ainsi que sous forme d'imprimés. Au cours de l'année, on a augmenté le nombre de séries statistiques provenant de la banque de données CANSIM. Il est possible d'obtenir des chiffres mensuels sur les exportations et les importations depuis 1968 pour chaque catégorie de produits par pays pour quelque 20 pays. La division a répondu à plus de 12,000 demandes de renseignements spécialisés.

Un certain progrès s'est fait sentir au chapitre du rapprochement des statistiques commerciales avec les États-Unis, principal partenaire commercial du Canada; ces statistiques sont maintenant publiées trimestriellement.

La Division des prix

La conversion de l'indice des prix à la consommation sur la période de base 1971=100 a débuté avec la publication des rapports d'août 1975, remplaçant ainsi la base 1961=100, en usage depuis 1969.

La division a lancé l'*Indice des prix à la consommation dans certaines agglomérations urbaines*, une nouvelle publication mensuelle renfermant les données sur l'indice des prix à la consommation de 14 villes au Canada, plus un résumé des principaux facteurs influant sur les mouvements des prix enregistrés. La division a également lancé une nouvelle publication trimestrielle, *Prix à la consommation et indices des prix*, qui renferme un recueil de renseignements sur les prix reliés à la consommation, à la fois historiques et courants. On y trouve également des comparaisons de prix à la consommation d'un endroit à un autre. Le numéro portant sur le dernier trimestre de référence de l'année civile comporte un supplément qui récapitule les mouvements des prix à la consommation pour l'année entière.

En octobre 1975, on a entrepris une enquête élargie sur les prix dans des supermarchés afin de mesurer la moyenne des prix sur 60 articles semblables dans 14 villes de St-Jean (T.-N.) à Vancouver. Les résultats de cette enquête ont paru en février 1976. En juin 1975, on a terminé et rendu publique une étude sur les différences des prix à la consommation d'un endroit à un autre pour les aliments consommés à la maison dans des villes du nord de l'Ontario (Sudbury, Sault-Ste-Marie et Thunder Bay) par rapport à Toronto.

Quant au système d'indemnisation des employés fédéraux à des postes isolés, la division a produit des indices des prix comparatifs pour environ 80 communautés isolées, à la suite de visites sur les lieux dans plusieurs établissements côtiers de la Colombie-Britannique, des communautés

au Yukon et des endroits du nord du Manitoba et de la Saskatchewan. Pour les employés fédéraux à l'étranger, la division a entrepris environ 60 enquêtes complètes sur les prix de détail et le coût de la vie dans plusieurs villes à l'étranger, et, afin de recueillir des renseignements et les contrôler, elle a visité 15 postes à l'étranger en Europe, en Afrique et en Extrême-Orient. On a calculé au-delà de 250 ajustements aux indices d'indemnités de services à l'étranger, principalement en raison de variations des taux de change et des variations des prix à la consommation.

Bon nombre d'indices publiés régulièrement ont été révisés; la révision portait à la fois sur la pondération et la période de base de 1971. On a commencé à publier des indices des prix des nouvelles maisons dans six villes, tout en ajoutant d'autres villes au champ d'enquête.

La Division des finances des entreprises

Au cours de l'année, cette division a élargi le champ d'enquête des plus importantes sociétés pour l'enquête trimestrielle sur les sociétés industrielles (statistique financière). Elle a ainsi obtenu un ensemble de statistiques financières amélioré. Elle a dressé des plans pour obtenir un meilleur échantillon des petites sociétés à partir d'une liste-mère plus courante. Ce programme est destiné principalement à augmenter la qualité des données pour les industries grâce à un nombre appréciable de petites sociétés. On prépare actuellement des statistiques supplémentaires qui comprennent la source et l'utilisation des fonds et les ratios financiers pour chacune des industries représentées. Ces statistiques devraient accroître l'intérêt de la publication trimestrielle.

On a apporté des améliorations aux statistiques sur les institutions financières en ajoutant des données sur les banques à charte et les sociétés de prêts. On a produit et publié des renseignements supplémentaires sur les courtiers en valeurs mobilières et les opérations hypothécaires. On a fait des études en vue de mettre en oeuvre des enquêtes sur les industries de l'assurance-vie, l'assurance-accident et l'assurance-maladie, les sociétés de placements, les sociétés de financement des entreprises et les fonds distincts. On a commencé l'informatisation et la collecte de plus de renseignements sur les faillites en prévision des demandes de renseignements qui accompagneront la nouvelle loi sur les faillites.

Les rapports annuels 1973 exigés en vertu de la Loi sur les déclarations des corporations et des syndicats ouvriers (CALURA) ont été présentés au Parlement. On a poursuivi des travaux sur un système informatisé qui doit servir à la publication portant sur les liens de parenté entre firmes.

La Division du travail

Une nouvelle publication mensuelle sur les statistiques de l'application de la Loi sur l'assurance-chômage est sortie en juillet 1975. Elle permettait au public d'obtenir plus rapidement des données sommaires, et des renseignements sur demande.

Au printemps 1975, on a commencé un rapport provisoire sur les postes vacants, donnant des renseignements essentiels trois ou quatre semaines après la fin du trimestre de référence.

On a commencé la collecte des données pour l'enquête sur la profession des salariés 1975 dans les délais prévus. On s'attend à ce que les résultats de l'enquête soient publiés vers la fin 1976.

On a tenu des réunions avec le Manitoba et la Nouvelle-Écosse afin qu'ils soient représentés à la banque de données de Statistique Canada sur les régimes de pensions. Lorsque les négociations avec ces deux provinces seront terminées, la banque de données comprendra les régimes de six provinces et représentera environ 9/10 de tous les régimes de pensions au Canada.

En 1976, une enquête mesurant les salaires, rémunérations et avantages sociaux des employés travaillant dans les industries de services commerciaux a été faite. Le cadre de cette enquête sera élargi de façon à couvrir toutes les industries tous les deux ans. Auparavant, ce rapport traitait d'une industrie choisie chaque année.

Comptes économiques et intégration

Ce secteur comprend la Direction du système des comptes nationaux (courants), la Direction du système des comptes nationaux (structurels), le conseiller supérieur en intégration et le coordonnateur de la statistique financière. La Direction des comptes nationaux (courants) s'occupe de la production, de l'analyse et de la diffusion du Système des comptes nationaux, à l'exception des tableaux d'entrées-sorties, ainsi que de l'établissement des statistiques économiques produites par le Bureau.

Le coordonnateur de la statistique financière

À la suite de la rédaction d'un rapport sur les besoins statistiques des utilisateurs des communications informatiques, on a entrepris plusieurs études statistiques en vue d'améliorer et d'étendre les données disponibles. Des consultations ont eu lieu auprès des représentants des administrations provinciales et du monde des affaires afin de déterminer les secteurs les moins avanta- gés.

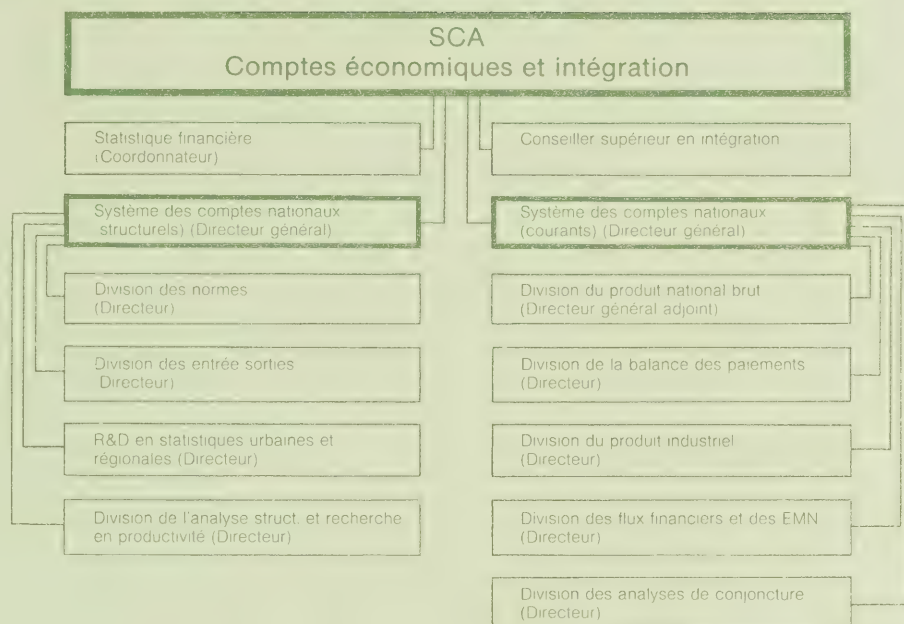
En collaboration avec les fonctionnaires provinciaux, on a procédé durant l'année au développement de l'information existante par l'exploitation des actes d'enregistrement hypothécaires.

Le conseiller supérieur en intégration

La plus grande partie du travail considérable qu'a représenté la préparation du deuxième numéro de *Perspectives Canada*, recueil de statistiques sociales de Statistique Canada, a été achevée au cours de 1975-1976. *Perspectives Canada II* comprendra outre une mise à jour d'un grand nombre de données contenues dans l'ouvrage original, plusieurs nouveaux chapitres et d'autres améliorations.

Une étude du coût des services ménagers pour une période d'un an a été entreprise et le travail statistique est presque terminé. Une description des concepts et des méthodes est en préparation. Cette étude servira de modèle à la projection des estimations à d'autres années de même qu'à d'autres catégories de travail ménager gratuit accompli par des travailleurs bénévoles.

On a continué de travailler à la réalisation de deux projets relatifs à l'établissement de données sur l'environnement. La plus grande partie de l'information destinée à un guide sur les données à incidences environnementales a été recueillie en 1975-1976, et les tableaux sont presque terminés. On a réalisé des progrès importants dans l'élaboration du cadre conceptuel des données sur l'environnement et il semble possible d'adapter un jour un tel cadre à l'ensemble du travail statistique.



Le Système des comptes nationaux (structurels)

La Division des normes

La division a participé à un projet visant à établir la faisabilité d'un centre de renseignements statistiques pour l'ensemble du gouvernement, qui mettrait à la disposition des utilisateurs des renseignements sommaires sur toutes les activités statistiques du gouvernement fédéral. Elle a aussi commencé à planifier la révision de la classification des activités économiques et des produits prévue pour 1980 afin d'offrir un système plus souple.

Les travaux se poursuivent sur un répertoire des concepts sociaux destiné à servir de guide à l'élaboration des questionnaires des enquêtes auprès des ménages. Une révision de la classification des professions a débuté pour assurer la continuité avec la version de 1970.

La Division des entrées-sorties

La division est chargée de l'élaboration des tableaux annuels d'entrées-sorties destinés à assurer l'intégration complète des révisions définitives dans les comptes de la production à l'intérieur du Système des comptes nationaux et la mesure de la productivité du travail dans les industries commerciales et dans certains groupes d'industries secondaires.

Au cours de 1975-1976, la division a terminé les tableaux d'entrées-sorties annuels provisoires aux prix courants pour 1967-1971. La mise au point définitive de ces tableaux devrait être terminée à

la fin du troisième trimestre de 1976.

La collecte de données pour les tableaux d'entrées-sorties annuels en prix constants pour 1961-1971 a été faite. L'analyse de ces données devrait être terminée à la fin de 1976. Les tableaux en prix constants seront alors diffusés pour révision critique et approfondie par les agents chargés de produire des données sur les prix et par les autres sous-systèmes du Système canadien des comptes nationaux.

La Division de la recherche et du développement en statistiques urbaines et régionales

La division a poursuivi son travail en vue de l'établissement d'une base de données urbaines par l'intermédiaire de CANSIM (Système canadien d'information socio-économique). L'objectif est d'identifier un minimum de séries chronologiques, tant sociales qu'économiques, les plus utiles aux fins du programme et de la politique urbaine. Les séries choisies devront être facilement disponibles; aucune difficulté insurmontable ne devrait empêcher de les produire pour un nombre déterminé de régions métropolitaines et de grandes villes. CANSIM sera chargé de la diffusion de ces données.

Un autre projet est d'utiliser les fichiers des ménages dans la recherche micro-urbaine. L'objectif était d'évaluer l'utilité des microfichiers dans la recherche micro-urbaine. La division a rédigé un document intitulé *Travel to Work Patterns and Behaviour in 1974 and 1975* utilisant les microdonnées des enquêtes spéciales. Le document analyse le comportement sur le choix du modèle, la disponibilité et l'utili-

sation du transport en commun et le temps mis à se rendre au travail.

La division a également l'intention d'examiner d'importants énoncés de politique des administrations et autres documents pour constater quels types d'information statistique ont été utilisés, à quelles fins et sous quelle forme, afin de pouvoir analyser et discuter en détails, les propositions qui en influencent les politiques. On pense que cet examen aidera à établir les priorités dans l'établissement des données urbaines.

La Division de l'analyse structurelle

Les activités de la Division de l'analyse structurelle portent surtout sur l'élaboration et la mise en application des modèles structurels de l'économie canadienne.

Le gouvernement et les organismes privés ont largement utilisé les modèles d'entrées-sorties et des prix en 1975-1976. Le modèle d'entrées-sorties a servi à une analyse interministérielle des conséquences de la fabrication des minéraux. Deux nouveaux modèles statistiques comparatifs sont venus s'ajouter au stock de modèles opérationnels. Il s'agit d'un modèle d'entrées-sorties interprovincial et d'un modèle énergétique. La division a participé à un projet dans lequel le modèle énergétique a servi à analyser de nouvelles sources d'énergie.

La division a entrepris l'établissement de modèles structurels temporels, le premier étant un modèle de simulation à long terme. Ce modèle a pour but de fournir un cadre informatique d'analyse des projections de variables économiques en termes de besoins et de faisabilité. Une première version de ce modèle sera opérationnelle au cours de la prochaine année financière.

Le Système des comptes nationaux (courants)

La Division du produit national brut

La préparation et la publication, en août 1975, des valeurs en dollars constants et des indices des prix correspondants en dollars de 1971 représentent une réalisation importante de la division, dans la poursuite de son mandat qui est de fournir des estimations trimestrielles, annuelles et chronologiques des comptes nationaux des revenus et des dépenses. Ces valeurs nouvelles remplacent la base de 1961, en usage depuis 1969.

La division a publié un nouveau document de référence en trois volumes: *Les comptes nationaux des revenus et des dépenses*. Le volume I comprend les estimations annuelles de la période 1926-1974. Le volume II renferme les estimations trimestrielles de la période 1947-1974. Le volume III contient une description des

concepts, de la méthodologie et des sources de données utilisés dans la préparation de ces estimations.

Les travaux d'estimation du produit intérieur brut provincial se poursuivent. Les données pour la plupart des postes ont été totalisées pour la période 1961-1971. Ces statistiques ont été soumises aux provinces et aux territoires en décembre 1975 pour examen et appréciation.

La Division de la balance des paiements

La division a poursuivi son programme de base touchant la préparation, l'analyse et la publication de statistiques et de documents trimestriels et annuels relatifs à la balance des paiements sur les opérations au compte de capital et au compte courant entre le Canada et les autres pays et les variations des réserves monétaires officielles du Canada. On a ajouté à ces publications des rapports mensuels sur les opérations sur valeurs mobilières avec des non-résidents. Diverses améliorations ont été apportées aux techniques de rassemblement de la balance des paiements, y compris un traitement amélioré des transferts de capitaux par les migrants.

La division a publié un ouvrage sur le bilan des investissements internationaux du Canada de 1968 à 1970 et rédigé la plus grande partie d'un document semblable pour la période de 1971-1973 dont certains renseignements ont fait l'objet de communications diverses au cours de l'année. Elle a aussi publié les résultats d'une enquête spéciale sur les recettes et les paiements au titre des services commerciaux en 1973 et entrepris une enquête spéciale sur les sociétés immobilières canadiennes d'investissement et de développement.

La Division du produit industriel

La publication mensuelle de la division, *Indices du produit intérieur réel par industrie*, présente des mesure mensuelles, trimestrielles et provisoires de la production des industries individuelles, de l'ensemble de l'économie, et d'un grand nombre d'agrégats industriels spéciaux. La division a fait paraître en janvier une nouvelle publication annuelle, qui établit ces mesures sur la base de pondération et de référence 1971.

Le personnel de la division poursuit son travail sur l'élaboration de mesures des sorties réelles pour les entreprises non commerciales. Il a élaboré des mesures de sorties réelles pour l'industrie des banques et de l'assurance-vie et a poursuivi les travaux sur d'autres composantes du groupe des finances, de l'assurance et des affaires immobilières.

La Division des flux financiers et des entreprises multinationales

La division a converti le traitement manuel des statistiques sur le trafic-voyageurs international à un traitement automatisé, ce qui réduit de deux semaines le délai de publication des données mensuelles.

Elle a terminé la préparation des bilans de l'actif et du passif financier pour tous les secteurs de l'économie canadienne; ces bilans paraîtront en même temps que les comptes des flux financiers au début de 1976-1977. Elle a publié une enquête-pilote établissant les statistiques sur la mainmise de l'économie canadienne par les multinationales en 1970-1971. La Section des entreprises multinationales et la Division des industries manufacturières et primaires ont poursuivi une étude conjointe sur le contrôle des entreprises manufacturières canadiennes.

La Division des analyses de conjonctures

Cette division fait de la recherche appliquée en prévisions économiques, économétrie et désaisonnalisation. Elle répond également de l'établissement et de la gestion de CANSIM, qui est une banque de données informatisée mise à jour quotidiennement et qui peut fournir des données sous forme d'imprimés mécanographiques ou de support lisible par machine via un réseau téléphonique national.

La division a entrepris une étude spéciale en collaboration avec le ministère des Finances pour déterminer les conséquences de certains taux du tarif douanier sur les importations de produits. Elle a commencé les travaux en vue de l'établissement d'une base de données industrielles régionale pour CANSIM.

Des techniques ont été élaborées pour accroître la fiabilité des principaux indicateurs de l'économie canadienne. On a réalisé des progrès dans l'application de ces indicateurs aux données canadiennes afin d'élaborer un indice principal de l'économie canadienne. La publication mensuelle *Revue statistique du Canada* a été entièrement automatisée grâce à CANSIM.

Ménages et institutions

Ce secteur a continué à consolider et à étendre les programmes de statistiques socio-économiques réalisés par ses deux directions générales.

Nombre d'enquêtes destinées à satisfaire à des besoins particuliers ont été parrainées par d'autres ministères, de même que par le gouvernement de l'Ontario.

Le secteur a, entre autres, élaboré un plan de statistiques sociales à moyen terme destiné à satisfaire aux besoins grandissants de renseignements des secteurs public et privé. Ce plan consiste à évaluer l'utilité et l'efficacité des programmes en cours; il comprendra également des propositions concernant des statistiques sociales supplémentaires.

Le personnel supérieur a continué à collaborer avec nombre d'organismes internationaux, y compris le Comité de l'institut interaméricain de statistique de l'amélioration des statistiques nationales, l'Organisation de coopération et de développement économique et la Conférence des statisticiens européens.

La Direction générale de la statistique des ménages

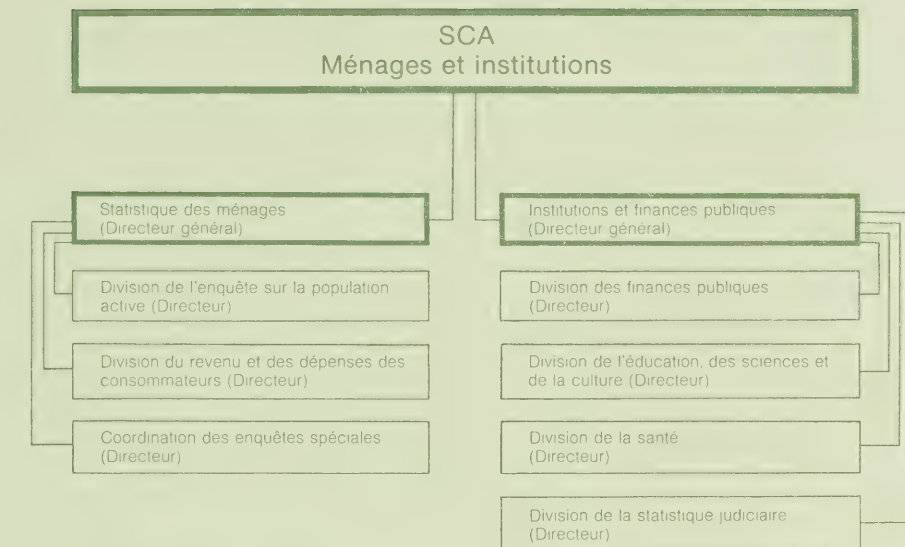
Cette direction générale a mis sur pied un plan à moyen terme sur la statistique sociale en s'inspirant des enquêtes auprès des ménages. Ce plan sera envoyé aux organismes des administrations fédérale et provinciales pour étude.

En collaboration avec le Secteur du recensement, des visites ont été effectuées dans toutes les capitales provinciales afin d'étudier les besoins en matière de statistiques de recensement et d'autres statistiques sociales. La direction a également participé à des séances d'étude avec d'autres ministères du gouvernement fédéral.

La Division de l'enquête sur la population active

L'enquête sur la population active a été remaniée et étendue en janvier 1976, après trois ans et demi de travail préparatoire; l'année 1975 a été consacrée au rapprochement avec l'ancienne enquête.

La nouvelle enquête fournit une gamme de renseignements beaucoup plus détaillés sur le marché du travail, notamment des données plus précises sur le cumul d'emplois, la durée de l'emploi, l'absence du travail, les mises à pied, les antécédents de travail, la recherche d'un emploi, les heures et la durée du travail trouvé, la situation familiale et les activités scolaires en cours. Le remaniement de l'enquête vient faciliter l'élaboration d'importantes mesures nouvelles des mouvements relatifs au marché du travail et ce, afin de compléter les estimations mensuelles des niveaux de l'emploi et du chômage. Il permet également d'élaborer de nouvelles mesures sommaires des conditions du marché du travail.



La division a également amélioré la conception du questionnaire, le plan de sondage, la collecte des données, les méthodes de traitement et les possibilités des enquêtes supplémentaires menées en même temps que les enquêtes mensuelles régulières. Au cours de l'année, elle a également sensiblement amélioré les plans de l'agrandissement de la taille de l'échantillon de l'enquête. Selon le calendrier, le remaniement de l'enquête sera terminé en 1976-77. La dernière étape du remaniement vise à améliorer la fiabilité et l'étendue des estimations de l'enquête, en particulier à l'échelle provinciale.

La Division du revenu et des dépenses des consommateurs

Dans le cadre du programme des enquêtes annuelles, la division a effectué au printemps de 1975 une enquête sur les finances des consommateurs et une autre sur l'équipement des ménages. Les résultats de ces deux enquêtes ont été publiés à l'automne. Deux documents annuels renfermant des données définitives sur la répartition du revenu pour 1973 recueillies au printemps de 1974 ont été publiés et mis à la disposition du public sous forme de microenregistrements de données. La division a participé à plusieurs études d'évaluation et de planification avec d'autres ministères fédéraux en leur fournissant des données recueillies à des fins particulières lors d'enquêtes précédentes.

Dans le cadre du programme des enquêtes sur les dépenses des familles, la division a publié des résultats provisoires de l'enquête de 1974 sur les dépenses alimentaires des familles; il s'agissait de la première enquête du genre depuis

l'enquête nationale de 1969. Le traitement de toute l'enquête sur le budget pour 1974 a été effectué en même temps que le traitement des résultats provisoires qui devaient paraître au cours de l'exercice financier suivant. Les deux enquêtes de 1974 couvraient 14 villes principales.

L'étude intitulée *Inégalité des revenus: Méthodologie statistique et exemples canadiens* (no 13-559 au catalogue) a été publiée à titre d'outil de référence méthodologique aux fins d'une étude en voie d'exécution qui vise à comparer les données du recensement de 1961 à celles de 1971.

Un document intitulé *Low Income in Canada* rédigé par deux employés de la division a été présenté à la conférence qui se tenait en Finlande en août 1975 (Conference of International Association on Research of Income and Wealth).

La Division de la coordination des enquêtes spéciales

La Sous-division de la gestion des enquêtes est chargée de diverses enquêtes à la demande d'autres ministères et organismes du gouvernement, d'institutions privées et de Statistique Canada.

Ces enquêtes sont souvent effectuées par le biais des enquêtes supplémentaires sur la population active. En 1975-76, quelques enquêtes supplémentaires ont porté sur l'activité scolaire, les habitudes de fumer et l'absence au travail.

D'autres enquêtes comme l'enquête sur les logements pour la Société centrale d'hypothèques et de logements et une nouvelle enquête de Santé Canada ont été conçues et effectuées à titre d'enquêtes totalement distinctes. Dans le cadre de l'enquête sur les logements, 73,645 ménages ont été interviewés.

À l'aide de la méthode de l'équipe de travail, la Sous-division s'occupe de tous les aspects de la gestion des enquêtes et notamment, de la définition des objectifs, de la conception du questionnaire, du traitement des données et de la diffusion des résultats au responsable de l'enquête. En grande partie, le travail est effectué selon une formule de recouvrement de fonds.

Il s'agit de la première année complète d'application des nouvelles directives du Conseil du Trésor concernant les demandes de renseignement à plus de 10 répondants; les ministères sont donc obligés de consulter Statistique Canada lorsqu'ils planifient de nouvelles enquêtes. Une sous-division distincte s'occupe de ces demandes. Plus de 125 consultations ont eu lieu, soit deux fois plus que l'année précédente.

La Division de la coordination des enquêtes spéciales collabore étroitement avec les autres divisions de Statistique Canada afin de bien orienter les responsables d'autres ministères chargés de planifier et de concevoir de nouvelles enquêtes. Une nouvelle publication intitulée *Nouvelles enquêtes* a été créée pour permettre la diffusion de renseignements au sujet des enquêtes effectuées.

La Direction générale de la statistique des institutions et des finances publiques

Cette direction fournit des renseignements sur les institutions canadiennes, y compris les caractéristiques des individus particuliers qui les composent, les services dont les institutions bénéficient, le personnel qui les exploite et les mesures relatives aux recettes et aux dépenses. Des progrès réalisés dans le domaine de la statistique de la sécurité sociale permettront de publier sous peu une revue détaillée sur les programmes connexes à l'échelle fédérale.

Au cours de la dernière année, des spécialistes ont été détachés auprès de plusieurs ministres et ministères afin d'améliorer l'utilisation des résultats statistiques.

La Division des finances publiques

La division a collaboré avec un groupe d'étude à trois niveaux sur les finances publiques en détachant l'un de ses fonctionnaires supérieurs auprès de ce groupe pour une année complète. Cette collaboration consistait également à orienter et à mettre à la disposition des utilisateurs les renseignements demandés.

De notables progrès ont été faits dans le domaine de l'établissement d'un inventaire automatisé permanent de la dette à long terme des administrations locales. Afin d'améliorer la qualité des données sur les flux financiers des administrations locales, l'enquête trimestrielle des dépôts et placements a été élaborée pour fournir de plus amples détails analytiques.

La Division de l'éducation, des sciences et de la culture

Cette division a autorisé environ 50 publications et répondu à quelque 2,000 demandes de renseignements statistiques.

Elle a effectué une enquête par sondage des caractéristiques et des aspirations de plus de 60,000 élèves des établissements d'enseignement postsecondaire dans tout le Canada. Elle a publié des statistiques faisant état des tendances dans la langue d'enseignement minoritaire et la langue seconde au Canada, des études spéciales faisant ressortir des variations dans les effectifs scolaires fondées sur des changements dans la structure de l'âge de la population canadienne et des résultats de la première enquête sur l'édition au Canada.

D'autres publications portaient sur les habitudes de voyages et sur les tendances des Canadiens, sur des statistiques concernant l'exploitation des principales sociétés d'arts d'interprétation au Canada et sur une analyse des séries statistiques révélant les moyens de déplacement des Canadiens pour se rendre au travail.

Une entente a été conclue avec le Ministère des collèges et des universités de l'Ontario visant à recueillir, à traiter et à dépouiller conjointement, les statistiques sur les étudiants à l'université. Les données recueillies et analysées visaient les étudiants de l'Ontario qui ont abandonné leurs études à mi-chemin.

Des plans ont été élaborés en collaboration avec le Ministère fédéral de la santé et du bien-être social afin de mener une enquête sur la santé physique et les activités récréatives. Des statistiques ont été publiées sur la main-d'oeuvre hautement qualifiée au Canada. On s'est servi du microfilm pour rendre les résultats de l'enquête plus accessibles.

La Division de la santé

La division est chargée des statistiques de la santé, des services de santé et des ressources sanitaires au Canada. Les données sont recueillies principalement auprès des administrations provinciales, des établissements ou des organismes relevant de celle-ci et des associations provinciales et nationales.

En collaboration avec les organismes fédéraux et provinciaux et avec les associations professionnelles, la division a réalisé des progrès au niveau de la déclaration des données en ce qui concerne les formules provinciales d'enregistrement des naissances, des décès et des mariages et au niveau de l'automatisation du système de contrôle et de traitement destiné à faire l'inventaire des infirmières autorisées.

Un nouveau système a été élaboré pour fournir aux clients des renseignements sur l'Ordre des infirmières de Victoria.

Des rapports de nature sociale rédigés au cours de l'année ont porté sur le personnel médical de la Saskatchewan de 1963 à

1972, le malade moyen et le nombre de cas dans les hôpitaux généraux, les hôpitaux disponibles pour le traitement des enfants souffrant de troubles émotifs, et sur les laboratoires de transfusion de sang dans les hôpitaux.

La Division de la statistique judiciaire

La division a effectué une étude des dépenses publiques relatives à l'administration de la justice au Canada, à la demande de la conférence fédérale-provinciale de 1974 sur la statistique judiciaire. Un système de renseignements intégré a été étudié, élaboré et mis sur pied dans les quatre provinces de l'Atlantique et au Québec. Des études à ce sujet ont été effectuées par les autres provinces et territoires.

Une enquête sur les tribunaux civils a été effectuée, dont les résultats ont été publiés. Une importante étude sur le meurtre au Canada, 1962 à 1974, a été entreprise et touche maintenant à sa fin.

La division a entrepris l'élaboration d'un plan quinquennal de préparation, analyse et diffusion de statistiques judiciaires au Canada. Avant d'élaborer ce plan, des séances de consultation se tiendront avec les principaux utilisateurs de la statistique judiciaire.

Services statistiques

La Division de l'élaboration d'enquêtes "ménages"

La division est chargée de la méthodologie des enquêtes "ménages" effectuées par Statistique Canada et d'autres ministères et organismes du gouvernement, ce qui comprend l'estimation, les erreurs de réponse et la conception des questionnaires. Elle fournit également des services d'experts sur la méthodologie des enquêtes spéciales.

Elle a établi la méthodologie et l'élaboration des systèmes portant sur l'augmentation de l'échantillon dans la nouvelle enquête sur la population active, et s'est occupée du fonctionnement des deux enquêtes (l'ancienne et la nouvelle), pendant la durée simultanée des deux. L'élaboration, la mise à l'essai et la révision finale du nouveau programme de réinterview, qui doit être effectué sur le terrain en mai 1976, sont terminées.

Parmi les enquêtes spéciales élaborées et entreprises, on retrouve une enquête 1974 sur le logement; des projets relatifs à une enquête pour 1978 ayant un champ d'observation plus vaste, qui engloberait les petits centres urbains et les régions rurales; un échantillon de l'enquête sur les dépenses alimentaires de 1976; une analyse d'une enquête-pilote; et des services fournis aux systèmes permanents de statistiques sur les voyages internationaux.

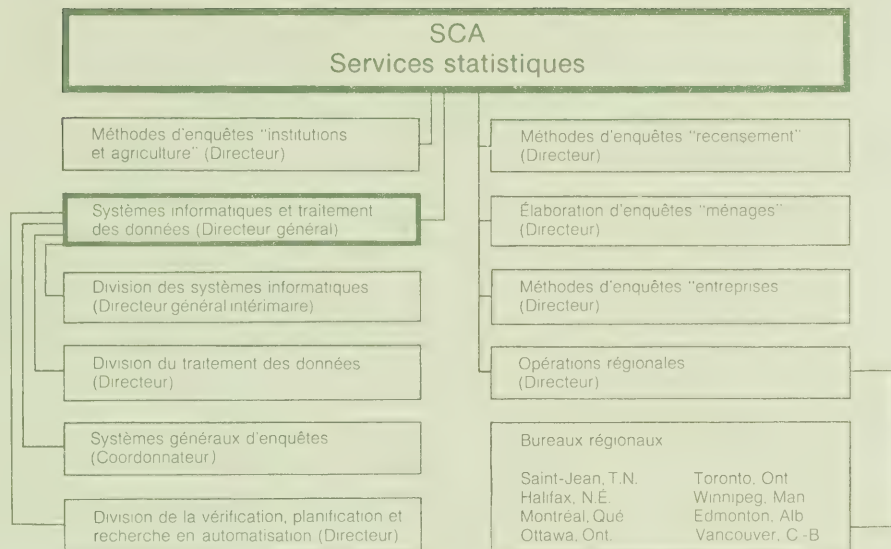
Il y a eu 152 demandes d'enquête de la part de 28 ministères et organismes fédéraux. Elles ont été examinées du point de vue de la cohérence méthodologique, de la duplication des données et de la validité et de l'utilité des renseignements recueillis.

La Division des méthodes d'enquêtes "entreprises"

Cette division est chargée de la méthodologie des enquêtes "entreprises" et, dans certains cas, de leur conception et de leur élaboration. Elle fournit des services aux autres divisions de Statistique Canada et à certains organismes de l'extérieur qui s'occupent également de statistiques des entreprises.

Le rapprochement de la liste de déclarations d'impôt des entreprises constituées en sociétés de Revenu Canada et du registre des entreprises s'est poursuivi, et la division a travaillé sur l'acquisition et l'utilisation des données fiscales, y compris les demandes de l'enquête sur les transporteurs routiers de marchandises pour 1975 de la Division des transports et de la Division de la construction.

La division a également collaboré aux enquêtes sur le commerce de détail, des organismes de bienfaisance, un recensement de la répartition des postes et de l'industrie de la restauration pour 1981. Elle a encore effectué la conception de l'enquête ainsi que les procédures d'estimation liées à une enquête sur les marchandises vendues au détail et un rapprochement détaillé des résultats de cette enquête avec ceux de l'enquête mensuelle sur le commerce de détail. Elle a commencé à travailler sur une enquête sur les coûts de main-d'œuvre pour 1976, qui engloberait les grands employeurs et les



domaines de la santé, de l'administration publique et de l'éducation.

Les services fournis à la Division des finances des entreprises englobaient les fonctions suivantes: mesurer la qualité de certains éléments des données provenant des dossiers d'impôt des entreprises constituées en sociétés; réétudier la conception de l'enquête à la fois trimestrielle et annuelle; aider à la mise à l'essai finale du système informatique qui délimite l'appartenance entre les sociétés, et qui calcule ce qui appartient aux non-résidents et ce qu'ils contrôlent.

La Division des méthodes d'enquêtes "institutions et agriculture"

Cette division fournit des services d'élaboration et de méthodologie des enquêtes d'évaluation et de consultation aux divisions de la Direction de la statistique des institutions et des finances publiques, aux Divisions de l'agriculture et du traitement des données, de même qu'aux utilisateurs de l'extérieur.

Le travail de méthodologie d'enquête portant sur l'enquête des étudiants de niveau post-secondaire a été effectué jusqu'à l'étape de la totalisation. À la suite d'une étude de faisabilité menée avec succès, une enquête sur les étudiants 1974, diplômés du premier cycle, a été entreprise pour le compte du Ministère des collèges et des universités de l'Ontario.

En novembre 1974, la division a commencé à travailler sur l'élaboration et la conception d'une enquête sur l'état de santé des Canadiens, laquelle fera appel à des interviewers pour la collecte des données et à un personnel paramédical pour les examens-cliniques. La mise à l'essai débutera au printemps 1976.

Elle a commencé à utiliser la rotation de l'échantillon dans l'enquête descriptive sur l'agriculture afin de diminuer l'obligation de

répondre pour certains exploitants agricoles. Une étude a montré que les estimations de ratio, basées sur les données du Recensement de l'agriculture 1971, pourraient améliorer bon nombre des estimations provinciales de l'enquête.

Une enquête-pilote sur les dépenses des fermes a été lancée en mars 1976. À compter d'avril 1977, les données serviront à administrer la Loi sur la stabilisation du revenu des producteurs de céréales de l'Ouest.

La Division des méthodes d'enquêtes "recensement"

Cette division fournit des services méthodologiques au Secteur du recensement. En 1975 et en 1976, elle a inventé un système automatisé afin que les renseignements contenus sur les questionnaires du recensement de 1976 soient transposés correctement en données sur bande magnétique, et a travaillé sur les systèmes conçus pour en vérifier les données.

Un programme a été formulé afin de mesurer la qualité des données du recensement 1976, et une planification préliminaire ainsi qu'une mise à l'essai des méthodologies et des questionnaires du recensement 1981 ont été amorcées.

La Division des opérations régionales

Un système financier automatisé a été mis en service pendant l'année afin de remplacer le système manuel. La mise sur pied de ces systèmes informatisés permet à la division d'effectuer son travail de planification financière pour l'ensemble du pays, et de surveillance du budget en le réglementant d'une façon plus exacte.

La Section des enquêtes auprès des entreprises a commencé l'élaboration d'un nouveau programme de profils d'opérations régionales

pour la Division des profils et des registres d'entreprises. Ce travail de mise en profils par les bureaux régionaux fournira des données à jour, à la fois à la Division des profils et des registres des entreprises et à la Division du travail. Une étude visant à donner plus d'ampleur au travail de collecte que la division effectue pour la Division des industries manufacturières et primaires a été amorcée.

L'enquête sur l'indice des prix à la consommation a entraîné l'élaboration de procédures et d'un programme de formation destiné à améliorer l'uniformité de l'attribution des prix. On travaille actuellement sur l'extension progressive de l'IPC, qui se fondera désormais sur environ 50 villes plutôt que sur 14.

En décembre 1975, on a cessé d'effectuer de façon simultanée la nouvelle enquête sur la population active et l'ancienne enquête, et la nouvelle enquête a acquis un statut officiel en janvier 1976. La base d'échantillon sera portée de 33,000 à 55,000 ménages, à compter de mars 1977.

La Section des projets spéciaux a effectué de nombreuses enquêtes sur les dépenses des familles, les finances des consommateurs, le logement et l'enseignement.

Les préparatifs du recensement 1976 ont continué. Ont été adoptées les procédures et un programme de formation pour les 35,000 employés temporaires du recensement a été mis sur pied. Huit bureaux régionaux de recensement ont été ouverts.

La Direction générale des systèmes informatiques et du traitement des données

Cette direction a la tâche de coordonner les activités de traitement électronique des données à Statistique Canada. Elle est constituée de quatre divisions: La Division de l'élaboration des systèmes, la Division du traitement des données, la Division des systèmes généraux d'enquête et la Division de la vérification, de la planification et de la recherche en automatisation. La direction s'occupe aussi de l'administration d'un programme de données.

La Section de l'administration des données a doté d'un statut officiel les 85 systèmes informatiques qui ont été mis en service au cours de l'année, ce qui en porte le total à 250. Le fonctionnement de ces systèmes continue à y être assuré.

Un dictionnaire de données, qui avait commencé par être un projet-pilote, a servi à la définition des données de cinq projets de systèmes, à la suite de quoi des améliorations y ont été apportées.

La Section de la formation a offert environ 40 cours de traitement des données pendant l'année à plus de 500 employés de Statistique Canada. Elle a accordé beaucoup d'importance à la possibilité de perfectionner les qualités nécessaires à la gestion et à la direction dans la Division de l'élaboration des systèmes informatiques.

La Division des systèmes informatiques

L'année a été marquée par l'utilisation de techniques et de systèmes nouveaux.

En effet, la division a mis à l'essai et évalué un certain nombre d'approches nouvelles dans le domaine du traitement des données de recensement. Ces approches étaient liées au contrôle et à l'imputation, aux méthodes de stockage des données de recensement au cours de la production aux méthodes adoptées pour les besoins de la base de données géographiques du fichier principal et au système de contrôle de traitement interactif direct.

Un système intégré de statistiques de l'état civil, maintenant en service, a succédé à 15 systèmes précédents. Un système destiné à la nouvelle enquête sur la population active a été mis en service en janvier 1976. Il comprend un nouveau réseau de mini-ordinateurs et de télécommunications portant sur l'ensemble du pays, qui soutient la préparation des données décentralisées, ainsi que leur saisie et leur transmission depuis et vers le bureau principal d'Ottawa.

La division a également participé aux travaux d'autres systèmes afin de pourvoir aux enquêtes de Statistique Canada.

La Division du traitement des données

La division s'est occupée du fonctionnement du système informatique le plus important de l'organisme, soit l'ordinateur IBM S/370-168. Elle s'est également occupée de l'entretien d'un réseau de terminaux internes comportant plus de 170 terminaux et sept terminaux télé-imprimeurs disséminés dans les zones des utilisateurs de l'organisme et destinés à l'élaboration des programmes, l'entrée des données éloignées, la révision de textes, etc.

Le travail effectué en 1975 comprenait: travaux informatiques traités — 641,745; programmes exécutés — 1,993,446; lignes imprimées — 1,016,334,000; nombre de pages — 4,019,564; heures d'utilisation du terminal — 87,895; bandes magnétiques retenues — 58,461.

La division a fourni des services à plus de 500 utilisateurs. Quant au volume de données stockées et aux services complets de la bibliothèques, ils contenaient plus de 60 millions de cartes perforées, 65,000 bandes magnétiques et 100 chargeurs. Plusieurs utilisateurs ont reçu de l'aide lors du programme de conversion au système métrique de Statistique Canada.

La Division des systèmes généraux d'enquêtes

Le travail de la division se concentrait sur l'utilisation de la technologie des systèmes de gestion des bases de données aux fins du traitement des systèmes d'enquêtes. L'établissement de l'ensemble homogène de gestion des données a constitué la réalisation la plus importante et tous les services de la division y ont participé.

Ce nouveau système est actuellement appliqué à plusieurs projets-pilotes relevant

des divisions des programmes de Statistique Canada et il sert également au traitement des données du recensement de 1976.

La Division de la vérification, planification et recherche en automatisation

Un rapport sur les services d'impression par ordinateur de l'organisme a été terminé. L'enquête sur le traitement des textes s'est poursuivie et une étude des besoins futurs en services de microfilms a été entreprise.

Le rapport annuel et le projet destiné au Conseil du Trésor ont été terminés. Enfin, une base de données servant à la planification en traitement des données électroniques a été élaborée et mise en service.

Services de diffusion et de promotion

Division de l'information

Cette division fournit des renseignements sur les programmes et les services du ministère ainsi que sur les programmes de relations publiques destinés à les favoriser. Elle assure également des services de dessin et de production graphiques.

Au cours de l'année, un projet a consisté à participer à la planification des relations publiques et de la publicité du recensement 1976.

La division a fait paraître l'*Annuaire du Canada*, *Canada*, *Le Quotidien de Statistique Canada*, *INFOMAT* et *SCAN*, la revue des employés du ministère.

La division a commencé la préparation du sixième numéro de *Canada* en espagnol. Il s'agit de numéros spéciaux produits pour les ministères de l'Industrie et du Commerce et des Affaires extérieures.

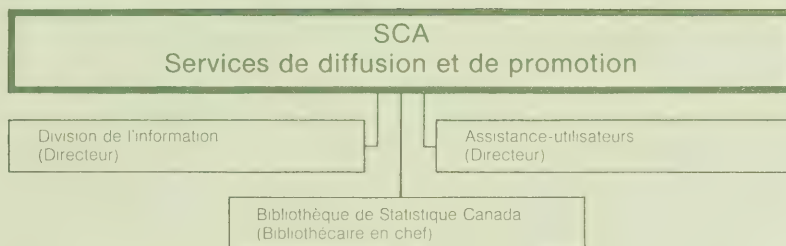
Division de l'assistance-utilisateurs

En 1975, la Division de l'assistance-utilisateurs a perfectionné ses services aux secteurs public et privé, élargi le champ de ses recherches sur les marchés et intensifié ses relations de travail avec les organismes statistiques provinciaux.

La Section de l'accès et de l'utilisation des données par l'entremise des neuf bureaux régionaux a reçu plus de 70,000 demandes de renseignements. Elle s'est efforcée, par des visites et des discussions avec les représentants des bibliothèques, des écoles de bibliothéconomie et des librairies, d'aider ces services à répondre aux demandes de renseignements et de promouvoir les produits du Bureau à l'intention du public. Le personnel des régions a atteint les hommes d'affaires, les étudiants et le personnel enseignant des universités grâce à des présentations de publications, à des démonstrations sur terminaux informatiques portatifs maintenant installés dans tous les bureaux, sauf un, et à la participation à des réunions et à des conférences, dont le Congrès des sociétés savantes, et à des réunions annuelles du Conseil économique des provinces de l'Atlantique et l'Association des manufacturiers canadiens. Les relations avec les petites entreprises ont été animées par des rapports avec les Chambres de commerce.

Le personnel du bureau central s'est engagé dans un programme visant à produire des documents destinés à aider les personnes qui n'ont pas l'habitude d'utiliser des statistiques et a continué à travailler à la révision et à la mise à jour du *Catalogue* de Statistique Canada.

La collaboration avec les provinces et les territoires a été très étroite. La Section des services consultatifs a fourni des services de secrétariat lors de 25 réunions, y compris deux du Conseil consultatif fédéral-provincial de la politique statistique. Elle



a coordonné un projet interministériel destiné à produire un résumé de la statistique de la forêt et de ses produits, a publié dix numéros de l'*Actualité statistique fédérale-provinciale*, de même que les débats d'une conférence, tenue en mars 1975, sur l'évaluation des perspectives commerciales de la Colombie-Britannique. Cette section a entrepris la planification d'un programme de formation pour les utilisateurs des données et a participé à la planification et à l'évaluation d'un programme d'échange de personnel entre Statistique Canada et les organismes provinciaux. Après avoir produit un inventaire des activités statistiques du Bureau, elle a entrepris l'élaboration d'un système direct de recherches bibliographiques et participé à la mise sur pied d'un Centre fédéral d'échange de renseignements statistiques.

La Section de l'analyse et du développement a veillé à la préparation de rapports très détaillés sur l'utilisation des statistiques dans les services de planification municipaux, les journaux communautaires, les Chambres de commerce et quatre industries principales à partir de programmes et d'entrevues destinés à connaître les réactions de tels utilisateurs. Des analyses trimestrielles et annuelles des demandes de renseignements adressées aux bureaux régionaux ont été distribuées dans tout le Bureau; les registres des abonnés à 38 publications, contenant 23,500 noms, ont été analysés et utilisés afin de mettre au point des indicateurs de pénétration du marché pour chacune de ces activités économiques. Un mécanisme permettant de faire connaître aux divisions concernées les demandes courantes de renseignements a aussi été élaboré.

Bibliothèque de Statistique Canada

La Bibliothèque de Statistique Canada vient de terminer une année pleine d'activités et de réalisations: elle a répondu à une forte demande de services habituels de bibliothèque tels que références, prêts entre bibliothèques, circulation de livres et de documents.

Elle a terminé la première étape d'un projet d'automatisation des opérations techniques de bibliothèque en convertissant les opérations et les registres relatifs aux rapports du budget des ouvrages et de la

circulation des périodiques en un système intégré.

La Bibliothèque a travaillé en relation étroite avec le personnel des divisions concernées afin d'en arriver à une meilleure gestion du budget unifié des ouvrages et à des économies, quand c'est possible, par la surveillance étroite des dépenses d'achats de livres et de périodiques. Cette collaboration très étroite servira également au rassemblement d'une collection d'ouvrages destinée à soutenir les programmes du Bureau.

La Bibliothèque a préparé le terrain en vue de l'établissement d'une "politique des collections" en faisant une enquête sur le nombre d'ouvrages qu'elle a et un inventaire de ce qu'elle possède.

La Bibliothèque a de plus entrepris de mettre sur microfiches les publications du Bureau, des premiers numéros jusqu'aux derniers. Plusieurs séries, comprenant 9,000 fiches, sont maintenant disponibles; elle comprennent les séries *Revue statistique du Canada*, *Recensement du Canada*, *Statistique de l'état civil* et *Commerce du Canada*.

Recensement

La Division des études et statistiques démographiques

Les objectifs principaux de la division sont de favoriser l'utilisation des statistiques démographiques de Statistique Canada, leur amélioration et celle de la qualité des futurs recensements en participant à l'élaboration de leur contenu.

La division a poursuivi la gestion par objectif du programme d'études analytiques du recensement de 1971. Elle a négocié des contrats relatifs à la recherche à l'extérieur, subventionnés en collaboration avec le Conseil canadien de recherche en Sciences sociales et neuf universités. Les contributions au programme des études des profils du recensement 1971 ont été effectuées en élaborant deux études portant sur la migration, lesquelles étaient presque terminées à la fin de l'année. Des progrès ont été accomplis en vue d'une publication de l'analyse de la composition socio-économique de la migration canadienne de

Le conseiller supérieur a continué son travail de conseil et de soutien à plusieurs ministères fédéraux et provinciaux, universités et organisations privées de recherche dans les domaines de la conception et de la réalisation de projets de recherche au moyen des données de Statistique Canada, et de la signification et de l'utilisation des données démographiques de Statistique Canada ou d'organismes connexes. La collaboration apportée à ces organisations a également pris la forme de revues critiques et de révisions de textes provenant des organisations, et de participation à la coordination de programmes à projets multiples comportant une part importante de recherches sur des données de Statistique Canada.

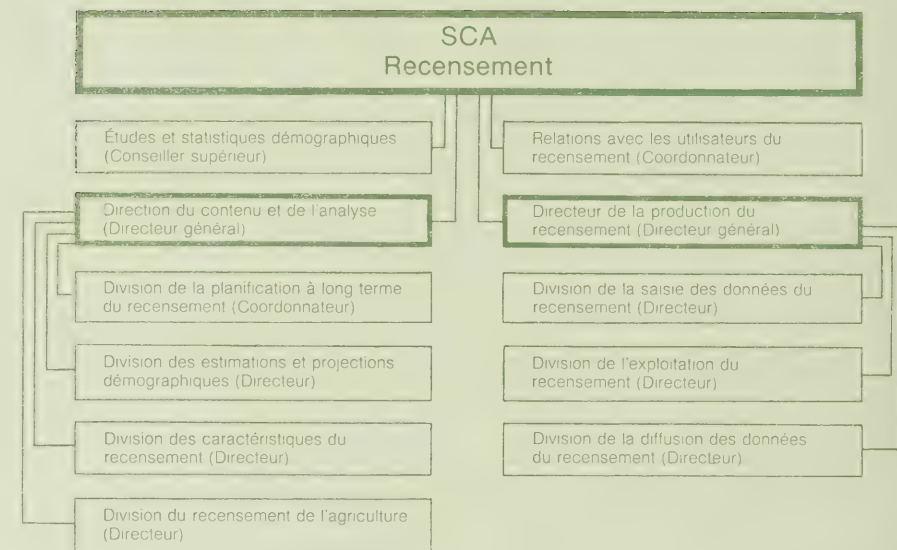
Relations avec les utilisateurs du recensement

La Division des relations avec les utilisateurs s'occupe principalement de sensibiliser le public, d'améliorer et de conserver son intérêt pour les renseignements provenant du recensement, d'évaluer et coordonner la réponse et les besoins de divers utilisateurs.

De concert avec la Division de l'information, elle a poursuivi la coordination et la supervision du programme de publicité du recensement 1976. De la même façon, elle a apporté sa collaboration à la planification du recensement de 1981 en obtenant diverses propositions de contenu des organismes fédéraux et des points de contacts provinciaux.

Ce groupe a collaboré avec le personnel de la Division assistance-utilisateurs dans le cadre d'une conférence fédérale-provinciale sur les projets de recensement et les besoins des ministères provinciaux. Des ateliers s'occupant des estimations démographiques ainsi que des ménages et des projections ont été également organisés aux niveaux fédéral et provinciaux dans l'ensemble du Canada.

Les rencontres, la publication du



bulletin "Communiqué" et des rapports périodiques sur les activités liées au recensement ont contribué à améliorer les relations entre les agents fédéraux et provinciaux appelés "points de contact".

La Direction du contenu et de l'analyse

La Division de la planification à long terme

Cette division a continué à faire porter le gros de ses efforts sur la planification du recensement 1981. S'appuyant sur les recherches et les analyses de l'année précédente, des séries d'objectifs possibles et de stratégies pour le recensement 1981 ont été présentés à l'administration de Statistique Canada. On en est arrivé à un accord sur les objectifs primordiaux de ce recensement.

Ces propositions ont alors été présentées dans le cadre d'une série de rencontres à travers le pays. Lors de rencontres avec les administrations fédérale, provinciales et territoriales, également avec d'autres utilisateurs, on a cherché à obtenir des renseignements sur les priorités recherchées dans les divers genres de données portant sur les Canadiens. De plus, des communications écrites sur les besoins des utilisateurs ont été reçues en provenance des points de contact fédéraux, provinciaux et territoriaux.

L'analyse des documents présentés a été effectuée par la division en fonction de critères pré-établis relatifs au coût, à la participation, au risque, à la convenance et à l'interchangeabilité. Des préparatifs à une rencontre des points de contact fédéraux, provinciaux et territoriaux ont été menés en mai 1976. Cette rencontre permettra de

passer en revue les résultats, d'analyser et de discuter les conséquences des résultats sur l'importance du recensement 1981.

La Division des estimations et projections démographiques

Cette division fournit des données sur les estimations et les projections démographiques. En plus de ses publications régulières, la division organise également divers types d'estimations démographiques spécialisées destinées aux programmes à frais partagés du gouvernement, elle produit des rapports spéciaux et fournit des conseils d'experts au Ministère de la main-d'œuvre et de l'immigration au chapitre des politiques d'immigration.

L'amélioration de la base de données portant sur la migration inter-provinciale et fondée sur des sources comme les programmes d'assurance-maladie, l'impôt et les allocations familiales s'est poursuivie. La division a collaboré avec les Nations Unies pour améliorer les données sur la migration internationale du Canada et élaboré un modèle intégré de projections démographiques, familiales et des ménages. Les recherches visant la préparation de nouvelles projections démographiques, des ménages et des familles fondées sur le recensement 1976 se sont poursuivies.

La division a animé neuf séminaires régionaux portant sur les projections et les estimations démographiques pour l'ensemble du Canada.

La Division des caractéristiques du recensement

La division a redoublé d'efforts pour terminer la publication et l'analyse des données du recensement 1971. De plus, la division a

travaillé sur les plans et les procédures définitifs du recensement 1976. La quasi-totalité du programme pré-établi de publication des données du recensement 1971 est terminée. Trois grandes études d'évaluation utilisant les données du recensement 1971 et portant sur l'industrie et l'occupation ont été mises en branle et les Tables de vie active 1971 ont été publiées.

La division a également participé à la conception et à la mise à l'essai de nouveaux questionnaires destinés au recensement 1981.

La Division du recensement de l'agriculture

Au cours de l'année, six documents contenant des données socio-économiques relatives aux exploitants agricoles et à leurs familles ont été publiés, et ce, grâce au raccordement des dossiers démographiques du recensement de 1971 à ceux de l'agriculture. Une étude analytique fondée sur ces données a également été préparée.

La Section du service-utilisateurs a continué à fournir un grand nombre de totalisations spéciales à divers utilisateurs. La demande de renseignements agricoles portant sur de petites régions telles que les zones de sols, les régions de mise en marché et les bassins de drainage a augmenté. Enfin, la préparation des procédures de traitement et des systèmes liés au recensement de l'agriculture 1976 a été achevée.

La Direction de la production

La Division de la saisie des données

Cette division fournit, à l'intérieur de l'ensemble des activités de collecte, des spécifications à la Division des opérations régionales et s'occupe de conclure des ententes liées aux recensements.

Au cours de l'année, la division a terminé le travail de délimitation et de traçage des régions géostatistiques pour l'ensemble du Canada et a fourni des cartes ainsi que des documents connexes nécessaires pour se conformer aux exigences de la collecte et de la diffusion du Secteur du recensement. Elle a travaillé en étroite collaboration avec le Bureau du commissaire à la représentation à la rectification des frontières de la carte électorale au niveau fédéral.

Les systèmes de traitement des bureaux régionaux et du bureau central destinés à servir lors du recensement 1976, y compris les formules, les procédures, les instructions programmées, les instruments de formation audio-visuelle, les programmes de dotation et également les systèmes de renseignements des administrateurs, ont été élaborés.

La division a coordonné le contrôle qualitatif du questionnaire du recensement 1976 et fourni des ressources de spécialistes

et techniques aux travaux liés à la mise sur pied et à la mise à l'essai des questionnaires du recensement comme préparation au recensement 1981.

La Division de la diffusion des données

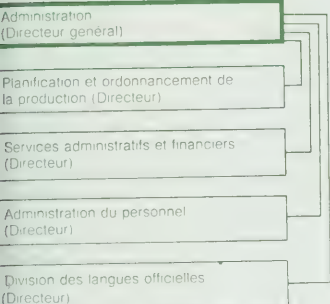
Elle comprend les activités gravitant autour de la consultation, des services de renseignements et de soutien aux utilisateurs des données du recensement. Elle met l'accent sur les demandes en totalisations spéciales et la distribution des données lisibles à la machine et sur microfilms provenant du recensement 1971. Au cours de l'année, les bandes-échantillons du recensement 1971 destinées au public, qui représentent un échantillon de 1% des microdonnées, ont été mises à sa disposition.

Les recherches sur microfilm de dossiers chronologiques de recensement destinées à prouver l'âge et le lieu de naissance ont continué à constituer une activité importante, puisque environ 28,000 personnes y ont fait appel.

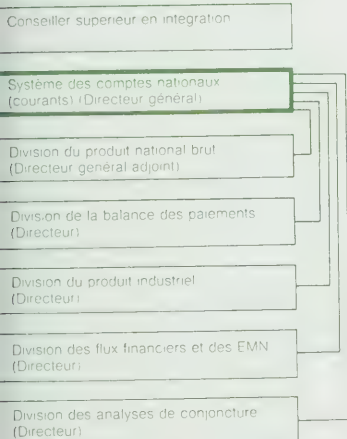
L'exploitation du recensement

La division a participé à des activités liées à trois recensements, 1971, 1976 et 1981. L'extraction des données provenant de la base de données 1971 s'est poursuivie pour répondre aux besoins intérieurs et extérieurs. De nouveaux systèmes de contrôle, d'imputation et de pondération destinés à convertir des données brutes provenant du recensement 1976 en une base de données acceptable ont été mise à l'essai ainsi que des prévisions aux systèmes d'extraction afin de réduire le temps de la navette d'enquête sur les données 1976.

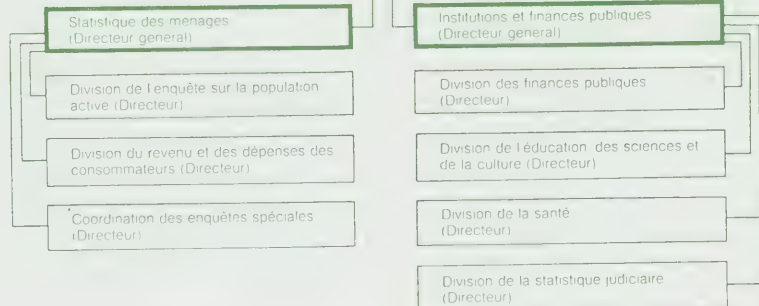
Des projets de traitements provisoires portant sur les données du recensement 1981 ont été établis.



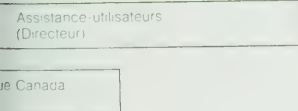
et intégration



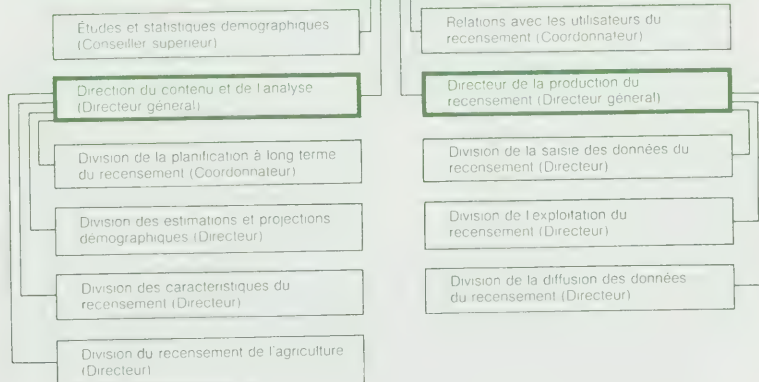
SCA Ménages et institutions



et de promotion



SCA Recensement



Chief Statistician

Policy, Planning and Evaluation
(Director General)

Strategic Planning
(Director)

Planning Operations
(Director)

Program Evaluation
(Director)

International Relations
(Coordinator)

ACS Business Statistics

Business Register and Profiling
Division (Director)

Industry Statistics
(Director General)

Agriculture Division
(Director)

Manufacturing and Primary Industries
Division (Director)

Transportation and Communications
Division (Director)

Merchandising and Services Division
(Director)

Construction Division
(Director)

General Statistics
(Director General)

External Trade Division
(Director)

Prices Division
(Director)

Business Finance Division
(Director)

Labour Division
(Director)

Economic Accounts

Financial Statistics
(Coordinator)

System of National Accounts
(Structural) (Director General)

Standards Division
(Director)

Input-Output Division
(Director)

Regional and Urban R&D
(Director)

Structural Analysis & Productivity
Research Division (Director)

ACS Statistical Services

Business Survey Methods
(Director)

Systems and Data Processing
(Director General)

Systems Development Division
(Acting Director General)

Data Processing Division
(Director)

General Survey Systems
(Coordinator)

Automation Research, Planning
and Audit Division (Director)

Institutional and Agriculture Survey
Methods (Director)

Household Surveys Development
(Director)

Census Survey Methods
(Director)

Field Division
(Director)

Regional Offices

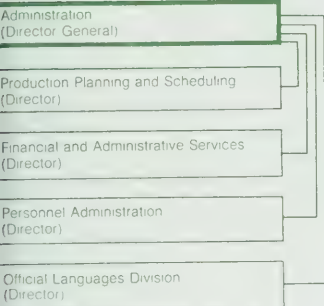
St. John's Nfld. Toronto Ont.
Halifax N.S. Winnipeg Man.
Montreal Que. Edmonton Alta.
Ottawa Ont. Vancouver B.C.

Maritime Statistics

Information Division
(Director)

Statistics Division
(Chief Librarian)

of Canada



d Integration

Senior Advisor Integration

System of National Accounts
(Current) (Director General)

Gross National Product Division
(Associate Director General)

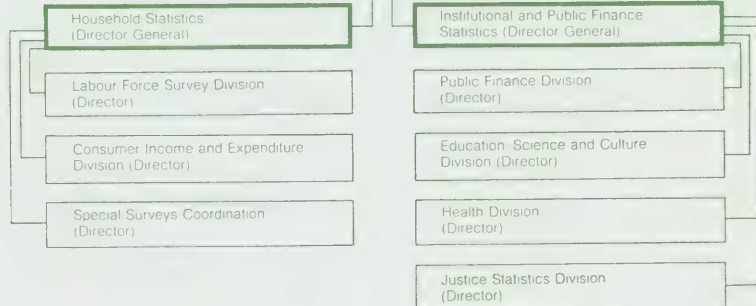
Balance of Payments Division
(Director)

Industry Product Division
(Director)

Financial Flows & Multinational
Enterprises Division (Director)

Current Economic Analysis Division
(Director)

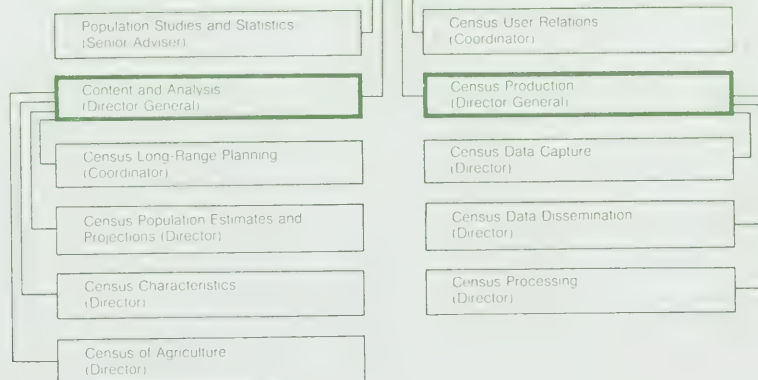
ACS Household and Institutional Statistics



Services

User Advisory Services
(Director)

ACS Census



Statisticien

Politique, planification et évaluation
(Directeur général)

Planification stratégique
(Directeur)

Opérations de planification
(Directeur)

Évaluation des programmes
(Directeur)

Relations internationales
(Coordonnateur)

Comptes écon

Statistique financière
(Coordonnateur)

Système des comptes nationaux
(structurels) (Directeur général)

Division des normes
(Directeur)

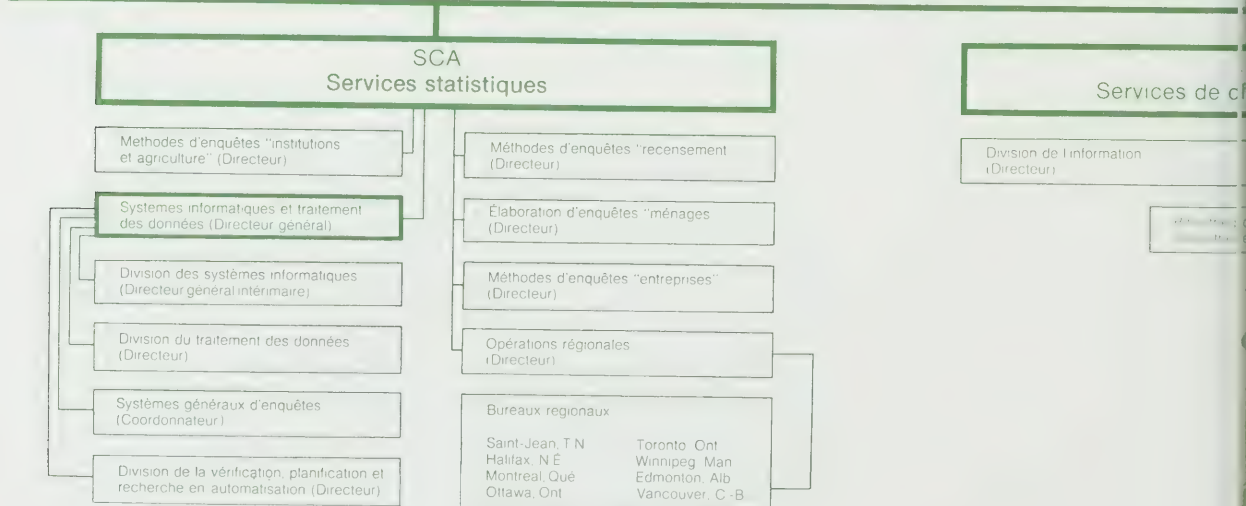
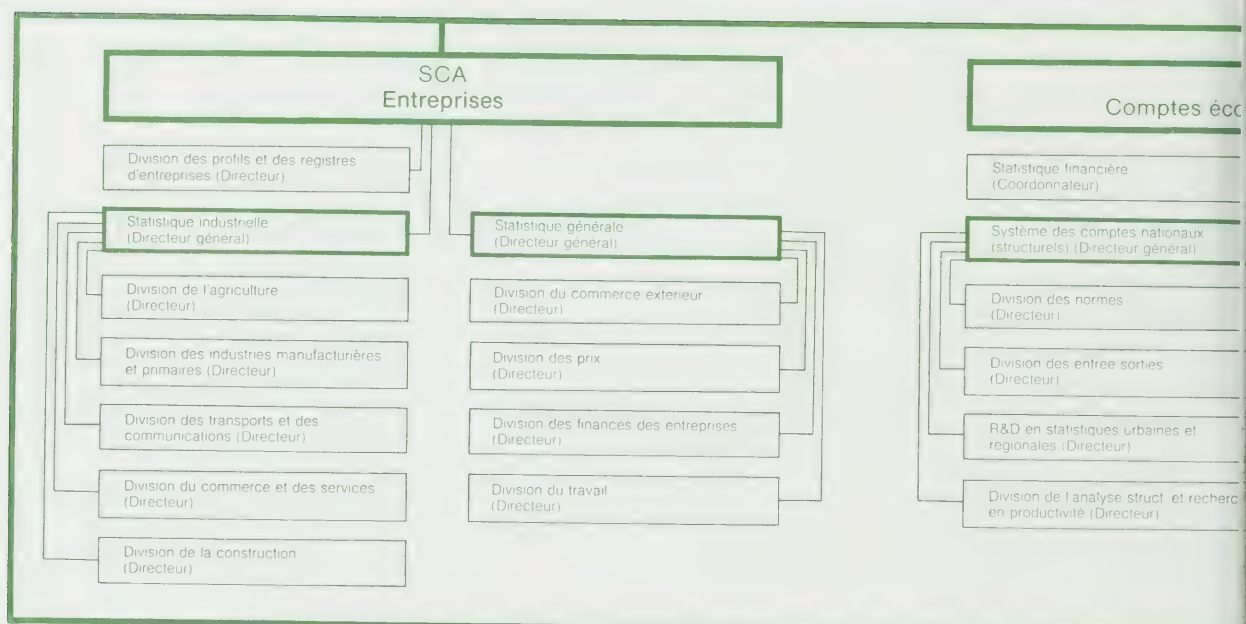
Division des entrées-sorties
(Directeur)

R&D en statistiques urbaines et
régionales (Directeur)

Division de l'analyse structurée et recherche
en productivité (Directeur)

Services de c

Division de l'information
(Directeur)



lies were released during the year. They were produced through the linkage of 1971 Census population and agriculture records. An analytical report based on these data was also prepared.

The user services section continued to provide a large number of special tabulations to a variety of users. There was an increasing demand for agricultural information for small special areas such as soil zones, marketing areas and drainage basins. The preparation of processing procedures and systems for the 1976 Census of Agriculture was completed.

Production Branch

Data Capture Division

This division, within its responsibilities for the collection operations, provides specifications to Field Division and makes contract arrangements for censuses.

During the year, the division completed the spatial delineation and drafting of geostatistical areas for all Canada and provided maps and related documents to meet Census Field collection and dissemination requirements. It worked closely with the Office of the Representation Commissioner towards the readjustment of federal electoral boundaries.

Regional and head office processing systems to be used in the 1976 Census, including forms, procedures, programmed instructions, audio visual training aids, staffing plans and management information systems, were developed.

The division co-ordinated the quality control for the 1976 Census questionnaire and provided professional and technical resources to projects related to the development and testing of census questionnaires in preparation for 1981.

Data Dissemination Division

Activities centered around consultation and provision of information and supporting services to users of census data. The emphasis was on handling requests for special tabulations and the distribution of machine-readable and microform data from the 1971 Census. During the year, the 1971 Census Public Use Sample Tapes — a 1% sample of microdata — were released to the public.

Searches of microfilm of historical census records for proof of age and birth place verification continued to be an important activity, with some 28,000 applications being served.

Census Processing Division

The division was engaged in activities related to three censuses — 1971, 1976, and 1981. Retrieval continued of data from the 1971 data base to meet internal and

external requirements. New automatic edit imputation and weighting systems to convert raw data generated by the 1976 Census to a statistically valid data base were tested and so were revisions to retrieval systems to reduce turn-around time for 1976 data. Preliminary plans were made for processing 1981 Census data.

the primary objectives of the division are to help promote the use of Statistics Canada's population statistics, to help promote the improvement of these statistics and to help improve the quality of future censuses by participating in the planning of census

The division continued project management of the 1971 census analytical studies program. It renegotiated contracts for external research, jointly sponsored with the Social Science Research Council of Canada, with nine universities. Contributions were made to the program of 1971 Census profile studies by undertaking the preparation of two studies dealing with migration, both nearly completed at year end. Progress continued towards publication of the manuscript of the 1971 analytical study on the socio-economic composition of Canadian migration which was

for creating, improving and maintaining public awareness of census information and for assessing and co-ordinating the response and speed of snail mail surveys.

Long-Range Planning Group

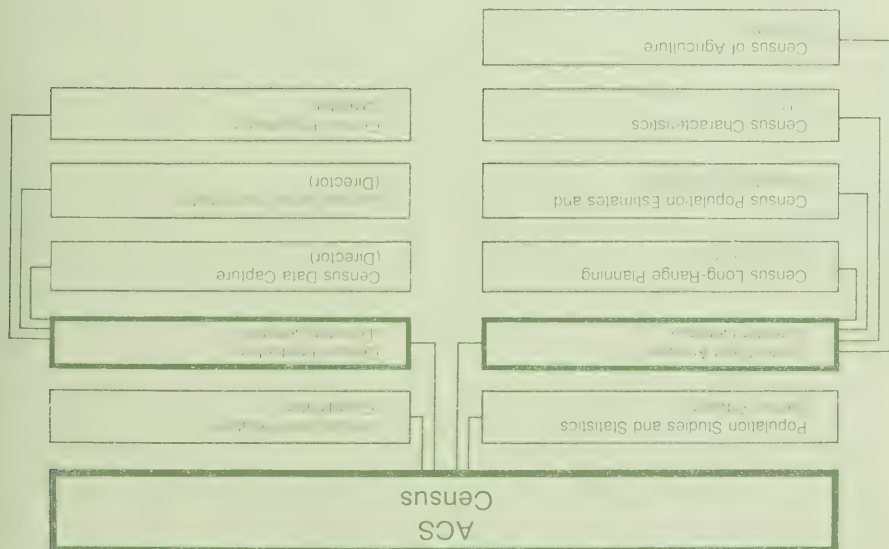
the group continued to concentrate the majority of its efforts on planning for the 1981 Census. Building upon the research and analysis of the previous year, sets of possible objectives and strategies for the 1981 Census were presented to the management of the Florida Agricultural Experiment Station on the primary purposes that should be served

Besides producing its regular publications, the division provides information on population estimates and projections. It organized diverse types of special popu-

Census of Agriculture
Division

This branch was also involved in design and testing of new questions for the 1981 Working Life Tables publication was completed. Three major evaluation studies using 1971 Census data on industry and occupation were started, and the 1971

Work continued on improving the international data base for such as medicare, taxation and family



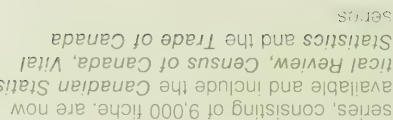
Information
Division

The division continued publication of the Canada Year Book, Handbook Canada, Statistics Canada Daily and INFOMAT, as well as SCAN, the department's employee magazine. Preparation began on the sixth Spanish-language edition of the Handbook. These special editions are produced for the departments of Industry, Trade and Commerce and External Affairs.

in 1975, User Advisory Services improved its services to both public and private sectors, expanded its market research activities and developed closer working relations with provincial statistical agencies. The nine Regional Offices received 98,756 inquiries in the year and made special efforts, through visits and seminars with libraries, library schools and bookstores selling Government publications, to help others answering inquiries and to promote the bureau's products. Regional staff research business students, university students and faculty through displays of publica-

Head office staff embarked on a program to produce literature designed to help inexperienced users of statistics and work continued on revising and updating the *Statistics Canada Catalogue*. Co-operation with provinces and territories was extensive. Secretariat services were provided for 25 meetings, including two meetings of the Federal-

provincial Consultative Council on Statistical Policy. The section co-ordinated an interdepartmental project to produce a compendium of forest and forest products statistics and published 10 issues of *Federal-Provincial Statistical News* as well as the proceedings of a conference on measuring the British Columbia business outlook, held in March 1975. Planning of a data user training program was started and the section was involved in the planning and evaluation of a staff exchange program



Statistics Canada
Library

The library completed an active and successful year, handling a heavy demand for all the usual library services — reference, inter-library loan and circulation.

The first phase of a project to auto-

The library completed an active and successful year, handling a heavy demand for all the library loan and circulation. The first phase of a project to automate the library's technical processes was completed with the conversion of the operations and records related to book budget reporting and serials circulation to a computerized system. The library worked closely with div-

social subject matter personnel to achieve budget and to economize where possible by closely monitoring spending for books and periodicals. It is expected that this close co-operation will also be useful in building the collection to support the bureaux programmes.

ishment of a collection policy with the completion of a quantitative survey and inventory of the library collection. Qualitative evaluation of the present collection and the establishment of appropriate collecting guidelines by subject will be completed early in the new year. A project to convert to microfiche the bureau's publications from their cardstock dates to the present was begun. Several

training program was completed for 35,000 temporary employees who carry out the census. Eight regional census offices were opened.

Systems and Data Processing Branch

This branch is responsible for co-ordinating electronic data processing activities in Statistics Canada. It is made up of four divisions — Systems Development Division, Data Processing Division, General Survey Systems Division and Audit Division. The branch manages a data administration program. The data administration group accepted into production status 85 computer systems during the year, bringing the total on hand to 250. These systems will continue to be operated by the group.

A data dictionary, started as a pilot project, was used for the data definition needs of five systems projects. Improvements to the dictionary were made as a result of this pilot project.

The training section offered some 40 courses on data processing over the year to more than 700 Statistics Canada employees. Particular attention was given to upgrading the management-supervisory skills of people in the Systems Development Division.

Systems Development Division

The year was marked by the use of new techniques and systems.

Testing and evaluation of a number of approaches new to census processing took place. These were related to editing and imputation, to methods of storing census data during production, to methods adopted for the geographic master file data base, and to the on-line inter-active process control system.

The integrated vital statistics system, now operational, replaced 15 previous systems. A system for the new labour force survey went into effect in January 1976. This system features the introduction of a mini-computer and a new data processing network across Canada that supports remote data transfer to and from the Ottawa head office.

The division participated in other systems to support bureau surveys.

Data Processing Division

The division operated the bureau's major computer system, an IBM S/370-168 computer. It also maintained an in-house terminal network with over 170 terminals and seven reader-printer terminals dispersed throughout the departmental user areas for program development, remote job entry, text editing and so on.

Work performed during 1975 included: computer jobs processed 641,745; programs, 992,446 lines printed 1,016,334,000.

Household Surveys Development Staff

The division is responsible for the methodology of household surveys conducted for the bureau and other government departments and agencies with respect to estimation, response errors and questionnaire design. It also provides methodology expertise on special projects.

It carried out methodology and systems development for the sample increase in the new survey on the labour force and maintained both surveys, old and new, during the parallel run of the two. Development, testing and final review of the new re-interview program to be implemented in the field by May 1976 was completed.

Among special survey jobs designed and undertaken were a 1974 survey of housing units and planning for a 1978 survey with expanded coverage to small urban centres and rural areas; a sample for the 1976 survey on food expenditure; analysis of a pilot survey and providing services for continuing systems for international travel statistics.

There were 152 submissions for surveys from 28 government departments and agencies. These were reviewed for methodological soundness, data duplication, validity and usefulness of the information collected.

Business Survey Methods Division

The division is responsible for survey methodology and, in some cases, system design and development. Its services are available to other divisions in Statistics Canada and certain agencies concerned with business statistics.

Reconciliation of Revenue Canada's list of corporate tax returns against the business register continued, and the division worked on the acquisition and use of tax data, including applications for the Transportation Division's 1975 survey of motor carrier freight and for the Construction Division. The division also assisted in surveys of retail trade, charitable organizations, a 1981 census of distribution and the food-serving industry. It also did the survey design and estimation procedures for a survey of retail commodities and carried out a detailed reconciliation of this survey's results with those in the monthly one on retail trade. Design was begun on a 1976 survey of labour costs covering large employers and the health, government and education sectors.

Assistance to the Business Finance Division included measuring the quality of certain aspects of data from corporate tax records; re-examining the design of both the quarterly and the annual survey; and aiding in the final testing of the computer system that delineates inter-corporate ownership of companies and facilitates non-resident ownership and control.

Institutional and Agriculture Survey Methods Division

The division provides survey design and methodology, evaluation and consultation to divisions in the institutional and public finance branch, agriculture and data processing divisions and outside users.

Survey methodology work up to the tabulation stage was completed on a survey of post-secondary students. A successful feasibility study resulted in a survey of 1974 graduates being undertaken for the Ministry of Colleges and Universities of Ontario.

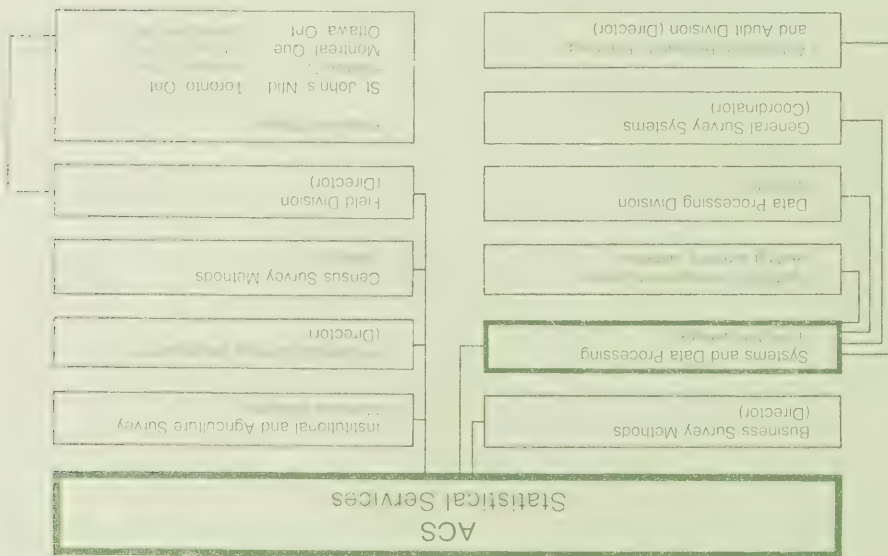
In November 1974 the division began work on the planning and design of a Canadian Health Survey that will use interviewers to collect health data and paramedics to do clinical examinations. Testing was begun in the spring of 1976. Sampling rotation was introduced into an agriculture enumerative survey to reduce the response burden on selected farm operators. A study showed that ratio estimates, based on 1971 Census of Agriculture data, would improve many of the survey's provincial estimates.

A pilot survey on farm expenditure was launched in March 1976. Starting in April 1977, the data will be used in administering the Western Grain Stabilization Act.

Census Survey Methods Division

This division provides methodological services to the Census Field. During 1975-76 it designed an automatic system to ensure that information on 1976 Census questionnaires is accurately converted to data on magnetic tape and worked on systems to edit the data.

ACS Statistical Services



A program was designed to measure the quality of 1976 Census data and early planning and testing of methodologies and questionnaires for the 1981 Census was begun.

Field Division

An automated financial system was put into operation during the year to replace the system used for the 1976 Census. The system was designed to handle the data and budget control work of the division comes under more timely control.

The Business Surveys Section started a new field profiling program for the Business Register and Profiling Division. This profiling work by the regional offices will supply current information for both the Business Register and the Labour division's collection work for the Manufacturing and Primary Industries Division.

The Consumer Price Index survey developed procedures and a training program to improve uniformity in pricing activities. CPI is being expanded in stages from 14 sample cities to approximately 50 cities. The parallel run involving the Revised Labour Force Survey and the old survey ended in December 1975. The revised survey is being increased from 33,000 to 55,000 households, effective March 1977.

The Special Projects Section carried out numerous surveys dealing with family expenditure, consumer finances, housing and education. Preparations for the 1976 Census continued. Procedures were worked out and a

**Institutions and
Public Finance
Branch**

This branch produced information on the institutions of Canadian society, including characteristics of individuals with whom personnel operating the institutions and measures of revenue and expenditure. Progress was made in the area of social security statistics and will result shortly in the publication of a comprehensive review of all related federal programs.

During the past year, professional staff were seconded to several federal ministries and departments in order to improve the utilization of statistical output.

**Public Finance
Division**

The division assisted a three-level study group on public finance by seconding one of its senior officers to it for the whole year. It also assisted by advising and making statistical arrangements.

Substantial progress was made on the development of a computer-based perpetual inventory of federal government long term debt. To improve the quality of financial flows data on local governments, the quarterly survey of cash and investments was expanded to provide for further analytical work.

**Education, Science and
Culture Division**

The division released close to 50 publications and responded to some 2,000 requests for statistical information. It undertook a sample survey of characteristics and aspirations of more than 60,000 students attending post-secondary educational institutions across Canada. It published statistics describing trends in minority and second language instruction in Canada, special studies projecting changes in school enrolments on the basis of shifts in the age structure of the Canadian population and results from the first survey of book publishing in Canada.

Other publications covered travel habits and patterns of Canadians, statistics on the operations of major performing arts companies in Canada and an analysis of statistical series on how Canadians travel to work. An agreement was reached with the Ontario Ministry of Colleges and Universities for joint collection, processing and dissemination of statistics on university students. Data was collected and analysed on the extent to which students drop out of school in Ontario.

Plans were developed, in co-operation with Health and Welfare Canada, for a proposed survey of physical fitness and recreation activities. Statistics were published on highly qualified manpower in Canada. Microfilm was used to give easier access to the survey results.

Household and Institutional Statistics

This field continued to strengthen and expand the social and economic statistics programs carried out by its two branches. A number of surveys to meet special needs were sponsored by other government departments, including the Government of Ontario.

A major thrust of the field has been the development of a medium-term plan for social statistics to meet the developing information needs of the public and private sectors. The plan will include both evaluation of effectiveness and efficiency of current programs and proposals for additional social statistics.

Senior staff continued to contribute to the work of a number of international organizations, including the Inter American Statistical Institute's Committee on the Improvement of National Statistics, the Committee for Economic Cooperation and Development and the Conference of European Statisticians.

Household Statistics Branch

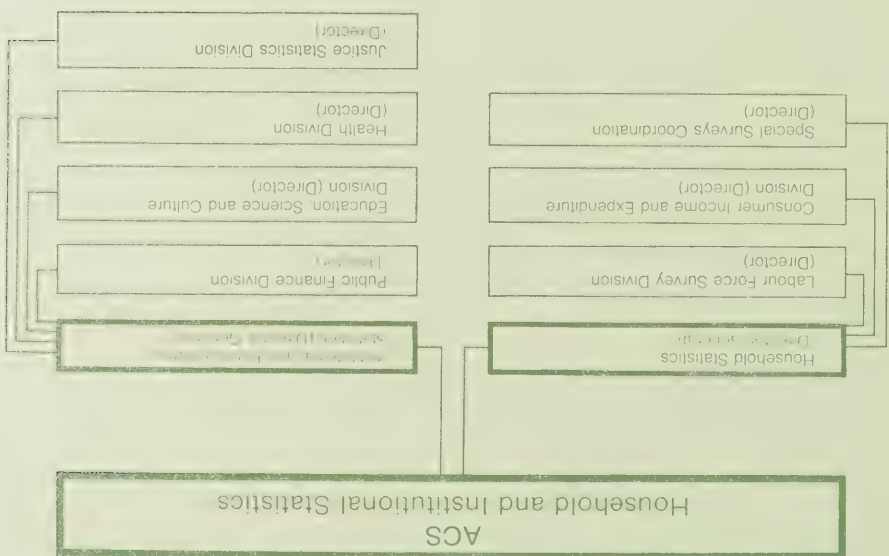
The branch completed a medium-term plan for social statistics originating from household surveys. The plan will be circulated to federal and provincial government agencies for discussion.

In connection with the Census Field visits were made to all provincial capitals to discuss requirements for census and other social statistics. The branch also participated in discussions with other federal government departments.

Labour Force Survey Division

The revised survey provides a much more comprehensive range of labour market information, including new data on such topics as multiple job-holding, duration of employment, absence from work layouts, previous work history, job search activities, hours and duration of work sought, family status and current labour activities. The revisions facilitate the development of important new measures of labour market flows to supplement the monthly estimates of the levels of employment and unemployment and permit the development of new statistical measures of labour market conditions.

Improvements also were introduced in the areas of questionnaire design, sample design, data collection and processing methods and in the capacity of supplementary surveys carried out in conjunction with the regular monthly survey. Substantial progress was made during the year in preparation for increasing the survey sample size. This final phase of the survey revision is scheduled for completion during 1976-77, and is designed



Special Surveys Co-ordination Division

The survey management subdivisions were asked to improve the reliability and scope of survey estimates, particularly at the provincial level.

In the program of annual surveys, the division undertook in the spring of 1975 a survey of consumer finances and a survey of household facilities and equipment. Data from both were published in the fall. Two annual reports, outlining final income distribution data for 1973, collected in the spring of 1974, were published and also made available to the public in the form of micro data tapes. The division co-operated in several planning and evaluation studies with other federal departments by providing them with special purpose data obtained from previous surveys. In the program of family expenditure surveys, preliminary results of the 1974 family food survey were published, the first food survey taken after the large national one in 1969. Processing of the complete budget survey for 1974 continued with preliminary results due to be issued in the next fiscal year. Both 1974 surveys covered 14 major cities.

"The study *Income Inequality: Statistical Methodology and Canadian Illustrations* (Catalogue No. 13-559) was published to serve as methodological reference to a large-scale income distribution study, in progress, comparing data from the 1961 and 1971 censuses.

A paper, *Low Income in Canada*, co-authored by two staff members was presented in August 1975 at the Conference of International Association on Research of Income and Wealth in Finland.

Statistics Canada to provide useful advice to those in other departments who are planning and designing new surveys. A new publication — *New Surveys* — has begun for the purpose of disseminating information about surveys conducted.

Special Surveys Co-ordination Division works closely with other divisions of Statistics Canada to provide useful advice to those in other departments who are planning and designing new surveys. A new publication — *New Surveys* — has begun for the purpose of disseminating information about surveys conducted.

analysis of new energy sources. The division is proceeding to develop well-structured structural economic models the first of which is a long-term simulation model. The objective of this model is to provide a computational framework within which projections of economic variables can be analysed in terms of resource requirements and feasibility. A first version of this model will be operational in the next fiscal year.

System of National Accounts (Current)

Gross National Product Division

A major undertaking in the division's program of providing quarterly annual and historical estimates of the national income and expenditure accounts was the preparation and release, in August 1975, of all constant-dollar values and associated price indexes in 1971 dollars. These replaced the 1961 base, in use since 1969.

A new reference document, *National Income and Expenditure Accounts*, was released, in three volumes. Volume I included annual estimates for the period 1926 to 1974.

Volume II covers quarterly estimates for the period 1947 to 1974. Volume III provides a description of the concepts, methodology and data sources used in producing the.

Work continued on the estimation of provincial Gross Domestic Product. Data for most items have been tabulated for the years 1961 to 1971. These statistics were presented to the provinces and territories for evaluation and discussion in December 1975.

Balance of Payments Division

The division continued its basic program of preparation, analysis and publication of quarterly and annual statistics and reports on the balance of payments on capital and current account transactions between Canada and other countries and movements in Canada's official monetary reserves. These publications were augmented by monthly reports on security transactions with foreign residents. Various improvements were made in the techniques used in compiling the balance of payments, including an improved treatment of capital transfers by

The division published a report on Canada's international investment position for the period 1968-70 and prepared the major part of a similar report for the period 1971-73 with selected information released at various times during the year. It also published results of a special survey of business service receipts and payments for 1973 and undertook a special survey of Canadian real estate investment and development companies.

Industry Product Division

The division's monthly publication *Indexes of Real Domestic Product by Industry* presents monthly, quarterly and preliminary annual measures of the quantity of production for individual industries, the total economy, and a large number of special industry aggregates. In January, a new annual report was published which placed these measures on a 1971 weight and reference base.

Division staff continued the development of real output measures for non-commercial industries. Real output measures were developed for banks and the life insurance industry and work is continuing on other components of the finance, insurance and real estate group.

Financial Flows and Multinational Enterprises

The division converted international passenger travel statistics from manual to automated processing, resulting in a two-week improvement in release to the public of monthly data. It completed work on the preparation of balance sheets of financial liabilities and assets for all sectors of the Canadian economy, which will be published in conjunction with the financial flow accounts early in 1976-77. A pilot study of statistics of corporate takeovers in the Canadian economy 1970-71 was released and the joint study of control of Canadian manufacturing establishments was continued by the Multinational Enterprise Section and the Manufacturing and Primary Industry Division.

Current Economic Analysis Division

This division carries out applied research in economic forecasting, econometrics and techniques for seasonal adjustment. It is also responsible for the development and operation of CANSIM. This is a computerized data bank that is updated daily and can provide data either in the form of printouts or in machine-readable form via a nationwide telephone network.

The division initiated a special study in co-operation with the Department of Finance to determine the effect on commodity imports of varying rates of tariff. Development of a regional industrial data base for CANSIM was launched. Techniques were developed for increasing the reliability of leading indicators of economic activity. Progress was made in applying them to Canadian data to develop a leading index for the Canadian economy. The review was completely automated, using CANSIM as the vehicle.

Economic Accounts and Integration

This field consists of the System of National Accounts (Current) and the System of National Accounts (Structural), the senior advisor on integration and the co-ordinator of financial statistics. The Current Accounts Branch is responsible for production, analysis and dissemination of the System of National Accounts — with the exception of input-output Tables — and for development of standard classification systems necessary to the integration of the bureau's economic statistical output.

Co-ordinator, Financial Statistics

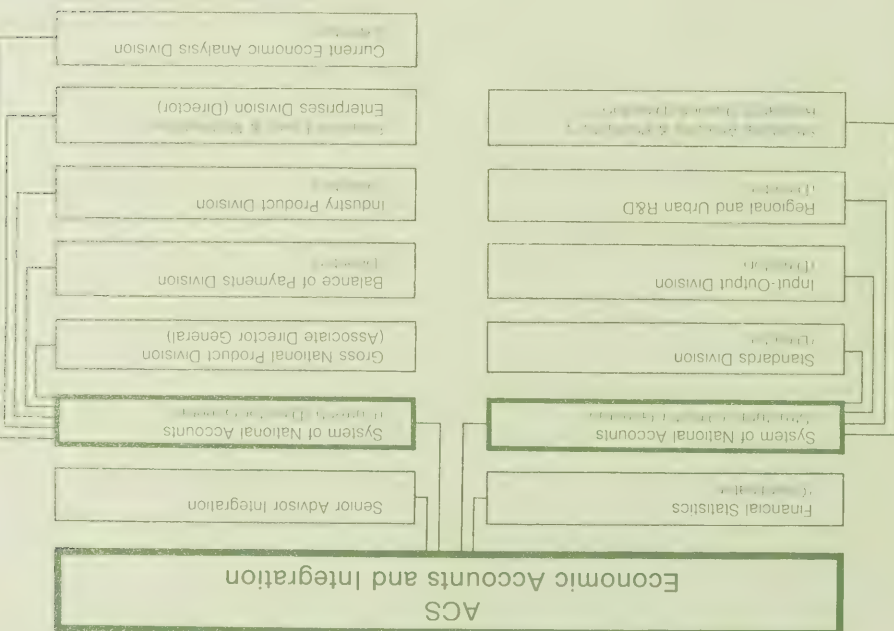
Following the preparation of a report covering the statistical needs of users of computer programs, several statistical studies were initiated to improve and extend available data. Provincial government and company officials were consulted to determine the areas most in need of development. In co-operation with provincial government officials, the information available through the tabulation of records of mortgage registrations was expanded during the year.

Senior Advisor on Integration

The major proportion of the substantive work on the second issue of *Perspective Canada*, which is the social statistics compendium of Statistics Canada, was completed during 1975-76. *Perspective Canada II* will include an update of many of the data contained in the original volume and will have several new chapters as well as other improvements. A study of the value of household services for one year was undertaken and the statistical work has nearly been finished. A description of the concept and methodology is in progress. This study will serve as a model for the extension of the estimates to other years as well as to other categories of non-market work performed by volunteer workers. With respect to environmental data development, two projects were brought closer to fruition. Most information for a handbook on environmental data was collected in 1975-76, and the tables were almost finished. Significant progress was made on construction of the conceptual framework for environmental data and the prospect for fitting such a framework at some time in the future into the totality of the statistical effort appears capable of realization.

System of National Accounts (Structural)

The division participated in a project to establish the feasibility of a government-wide statistical clearing house which would make available to users summary information on all statistical activities of federal government. Planning was undertaken for the revision of the industrial and commodity classification



selected series should either be readily available or no surmountable difficulties should exist to produce them for a select number of metropolitan areas and large cities. The data are to be disseminated by CANSIM. Another project is utilization of household files for micro-urban research. The objective has been to evaluate the utility of micro files for micro urban research. A paper, *Travel to Work Patterns and Behaviour in 1974 and 1975*, using micro data from special surveys was prepared. The paper analysed behaviour on model choice, availability and use of public transportation and travel times to work. The division also intends to review important policy papers of governments and documents to see what types of statistical information were utilized for what purposes and in what form to present arguments or to elaborate on certain proposals leading to policy recommendations. It is expected that the review will contribute to determining priorities for urban data developments.

Structural Analysis Division

The activities of the Structural Analysis Division centre on the development and operation of structural economic models of the Canadian economy. Both the input-output and price models were used extensively by government and private agencies in 1975-76. The input-output model was used in an interdepartmental analysis of the impact of the fabrication of minerals. Two new comparative static models were added to the stock of operational models — an inter-provincial input-output model and an energy model. The division participated in a project in which the energy model was used to perform

in 1980 to provide a more flexible system. Work continued on a social concepts directory designed as a handbook for questionnaire design for household surveys. A revision of the occupational classification was begun which is intended to preserve continuity with the 1970 version.

Input-Output Division

The division is responsible for the development of annual input-output tables intended to provide fully integrated final revision to the production accounts within the System of National Accounts and for measuring labor productivity in the commercial industries and in some subsidiary industry aggregations. During 1975-76, preliminary current price annual input-output tables for the years 1967-71 were completed. The final balancing of these tables should be completed by the end of the third quarter of 1976. Data for the constant price annual input-output tables for the years 1961-71 were collected. Analysis of such data should be completed by the end of 1976. At that time, such constant price tables will be released for thorough and critical revision by officers responsible for producing price data as well as other subsystems of the Canadian System of National Accounts.

Regional and Urban Research and Development Division

The division continued work on development of an urban data base in CANSIM (Canadian Socio-economic Information Management System). The objective is to identify a minimum number of data series, both social and economic, which have the greatest usefulness for urban policy and program purposes. The

In 1976, a survey measuring wages, salaries and fringe benefits of employees working in business service industries was conducted. This survey will be expanded to cover the all-industry field every two years. Previously, this report covered every year a selected industry

Merchandising and Services Division

Several important developments in the year were reflected in the division's program of surveys of the retail, wholesale and service trades.

Revised retail trade data for 1972-74, based on redesign of the monthly sample, were published in June 1975. The 1973 shopping

report featured a new section on indoor shopping malls and provided information on the floor space and parking area of shopping

centres. The 1974 retail commodity survey was

carried out.

A new biennial census program was initiated in the wholesale trade sector, covering

wholesale merchants one year and agents and

retailers the next. Planning was begun for a new

monthly sample survey of wholesale merchants,

scheduled for implementation in April 1977.

Two new reports on non-commercial services were issued and a new survey of consulting

engineering services was inaugurated. An expansion in the monthly restaurant survey was

undertaken which will cover the entire food

and beverage-serving industry, effective July

1977. The 1975 edition of *Market Research Handbook* was published and an intensive study

on shopping centres in Canada, 1950-1973, was

carried out.

Construction Division

The division provides a wide range of detailed information on housing and building permits,

the construction industry, private and public

investment in Canada and on national wealth

and capital stock.

A master file of non-residential building projects is being created to record data on

which presents a compendium of consumer-related price information, both historically and in

current detail. Also included are place-to-place comparisons of consumer prices. The

issue for the last reference quarter in the calendar year contains a supplement which re-

views consumer price movements for the

An expanded supermarket price survey was

conducted in October 1975 to measure average

retail prices for about 60 comparable items in

14 cities from St. John's to Vancouver. The

results of this survey were published in

February 1976. A study was completed and pub-

lished place-to-place consumer price

differentials for home-consumed food in June

1975 in Northern Ontario cities — Sudbury,

Sault Ste. Marie and Thunder Bay — as com-

pared to Toronto.

In continuing to provide statistical

support of the allowance system for federal

employees at isolated duty stations, compara-

tive price indexes were produced for about 80

remote communities following on-the-spot visits

to various coastal British Columbia settlements,

Manitoba and Saskatchewan. In support of the

foreign service allowance system, about 60

full-scale retail price and living cost surveys

were conducted in various cities abroad, and

information-gathering and monitoring visits

were made to 15 foreign posts in Europe.

General Statistics Branch

External Trade Division

During the year the division began a better

system of deriving information from customs

data on capital and repair expenditures with

joint survey arrangements for the collection of

information by region and actively resulted in

provincial needs for more detailed investment

view of reducing of response burden and costs.

tionnaires and more use of sampling, with a

tax data to permit the simplification of ques-

tionnaires. Research was started on the use of

the exception of the engineering general con-

struction, monthly design, international and

commodity trade data.

The program of annual censuses of the

provinces of Quebec and Saskatchewan.

declarations for imports. A coding system was

designed and a statistical file built up on such

things as country of origin, the commodity in-

voled and the type of transport used. The file

will be valuable for data users in this field.

The preliminary report on external trade

statistics was improved by having total values

of exports and imports adjusted to make them

comparable with the balance of payments.

The major division publications of trade

statistics have been made available on micro-

fiche and tape as well as in printed form. The

number of statistical series available from

the CANSIM data bank was increased during the

year. Monthly figures for each commodity

category by country for some 20 countries,

covering exports and imports back to 1968,

are available. The division replied to more

than 12,000 requests for special information.

Progress was made with the United States,

Canada's main trading partner, in reconcila-

tion of trade statistics, which are now published

monthly.

The division introduced *Consumer Price*

Indexes for Regional Cities, a new monthly

publication for the release of CPI data for 14

cities across Canada, including a synopsis of

movements. It published a new quarterly publi-

cation, *Consumer Price Index*, including a synopsis of

place comparisons of consumer prices. The

issue for the last reference quarter in the cal-

endar year contains a supplement which re-

views consumer price movements for the

An expanded supermarket price survey was

conducted in October 1975 to measure average

retail prices for about 60 comparable items in

14 cities from St. John's to Vancouver. The

results of this survey were published in

February 1976. A study was completed and pub-

lished place-to-place consumer price

differentials for home-consumed food in June

1975 in Northern Ontario cities — Sudbury,

Sault Ste. Marie and Thunder Bay — as com-

pared to Toronto.

In continuing to provide statistical

support of the allowance system for federal

employees at isolated duty stations, compara-

tive price indexes were produced for about 80

remote communities following on-the-spot visits

to various coastal British Columbia settlements,

Manitoba and Saskatchewan. In support of the

foreign service allowance system, about 60

full-scale retail price and living cost surveys

were conducted in various cities abroad, and

information-gathering and monitoring visits

were made to 15 foreign posts in Europe.

Business Finance Division

Coverage of larger corporations in the quarterly

survey of industrial corporation financial

statements was increased during the year. This

resulted in an improved set of financial statis-

tics. Plans were developed to draw a better

sample of smaller corporations from a more

current universe list. These plans aimed chiefly

at increasing the quality of data for industries

with a substantial number of smaller corpora-

tions. Additional statistics, which include

source and application of funds statements and

financial ratios for each published industry.

are being prepared. They should increase the

usefulness of the quarterly publication.

Published statistics on financial institu-

tions were improved by inclusion of data on

chartered banks and on finance leasing corpora-

tions. Additional detail was produced and

released on investment dealers and on mortgage

activities. Research was undertaken to permit

the development of surveys of the life insurance

industry, investment holding corporations, busi-

ness financing corporations and segregated

funds. Automation and the gathering of more

detail on bankruptcies were started in prep-

aration for information requirements that

will accompany the new Bankruptcy Act.

The 1973 annual reports required under

the Corporations and Labour Unions Returns Act

(CALURA) were tabled in Parliament. Develop-

ment progressed on an automated system to

produce the publication on intercorporate

A new monthly release of statistics on operation

of the Unemployment Insurance Act was begun

in July 1975. It resulted in faster release to the

public of summary data, with details available

on request.

A preliminary report on job vacancies

was begun in the spring of 1975, providing

basic information three to four weeks after

the end of the quarterly reference period.

Data collection for a 1975 survey on

occupational employment was completed on

scheduled. Results of the survey are expected

to be released late in 1976.

Meetings were held with Manitoba and Nova

Scotia to have them represented in the Statistics

Canada data bank on pension plans. Once ne-

gotiations with the two provinces are com-

pleted, the data bank will cover plans of six

provinces and account for almost nine-tenths

of all pension plans in Canada.

Africa and the Far East. Over 250 foreign

allowance index adjustments were calculated

primarily because of shifts in foreign ex-

change rates.

A number of regularly published indexes

were revised to a 1971 time and weight base.

Publication started for new housing price

indexes for six cities, with additional cities

being added to the survey.

Business Finance Division

Coverage of larger corporations in the quarterly

survey of industrial corporation financial

statements was increased during the year. This

resulted in an improved set of financial statis-

tics. Plans were developed to draw a better

sample of smaller corporations from a more

current universe list. These plans aimed chiefly

at increasing the quality of data for industries

with a substantial number of smaller corpora-

tions. Additional statistics, which include

source and application of funds statements and

financial ratios for each published industry.

are being prepared. They should increase the

usefulness of the quarterly publication.

Published statistics on financial institu-

tions were improved by inclusion of data on

chartered banks and on finance leasing corpora-

tions. Additional detail was produced and

released on investment dealers and on mortgage

activities. Research was undertaken to permit

the development of surveys of the life insurance

industry, investment holding corporations, busi-

ness financing corporations and segregated

funds. Automation and the gathering of more

detail on bankruptcies were started in prep-

aration for information requirements that

will accompany the new Bankruptcy Act.

The 1973 annual reports required under

the Corporations and Labour Unions Returns Act

(CALURA) were tabled in Parliament. Develop-

ment progressed on an automated system to

produce the publication on intercorporate

A new monthly release of statistics on operation

of the Unemployment Insurance Act was begun

in July 1975. It resulted in faster release to the

public of summary data, with details available

on request.

A preliminary report on job vacancies

was begun in the spring of 1975, providing

basic information three to four weeks after

the end of the quarterly reference period.

Data collection for a 1975 survey on

occupational employment was completed on

scheduled. Results of the survey are expected

to be released late in 1976.

Meetings were held with Manitoba and Nova

Scotia to have them represented in the Statistics

Canada data bank on pension plans. Once ne-

gotiations with the two provinces are com-

pleted, the data bank will cover plans of six

provinces and account for almost nine-tenths

of all pension plans in Canada.

Africa and the Far East. Over 250 foreign

allowance index adjustments were calculated

primarily because of shifts in foreign ex-

change rates.

A number of regularly published indexes

were revised to a 1971 time and weight base.

Publication started for new housing price

indexes for six cities, with additional cities

being added to the survey.

Business Finance Division

Coverage of larger corporations in the quarterly

survey of industrial corporation financial

statements was increased during the year. This

resulted in an improved set of financial statis-

tics. Plans were developed to draw a better

sample of smaller corporations from a more

current universe list. These plans aimed chiefly

at increasing the quality of data for industries

with a substantial number of smaller corpora-

tions. Additional statistics, which include

source and application of funds statements and

financial ratios for each published industry.

are being prepared. They should increase the

usefulness of the quarterly publication.

Published statistics on financial institu-

tions were improved by inclusion of data on

chartered banks and on finance leasing corpora-

tions. Additional detail was produced and

released on investment dealers and on mortgage

activities. Research was undertaken to permit

the development of surveys of the life insurance

industry, investment holding corporations, busi-

ness financing corporations and segregated

funds. Automation and the gathering of more

detail on bankruptcies were started in prep-

aration for information requirements that

will accompany the new Bankruptcy Act.

The 1973 annual reports required under

the Corporations and Labour Unions Returns Act

(CALURA) were tabled in Parliament. Develop-

ment progressed on an automated system to

produce the publication on intercorporate

A new monthly release of statistics on operation

of the Unemployment Insurance Act was begun

in July 1975. It resulted in faster release to the

public of summary data, with details available

on request.

A preliminary report on job vacancies

was begun in the spring of 1975, providing</

Business Statistics

The field is responsible for the collection, processing and publication of statistics from business firms. It is divided into two branches — Industry Statistics and General Statistics. The former is responsible for statistics on agriculture, manufacturing and primary industries. The latter deals with the collection, processing and publication of statistics on aspects of business activity in the country.

Business Register and Profiling Division

The division consists of three subdivisions — Business Register, Profiling and Tax Record Access. At the end of fiscal 1975-76, the process of integration of the division's activities resulted in the merging of part of profiling subdivision with business register subdivision and the secondment of the remainder of profiling subdivision's staff to a task force on integration of economic statistics.

Business Register

Work to extend the business register to include non-employer corporations as well as all employer businesses was largely completed. Divisional responsibilities were transferred to the Business Register, Profiling and Tax Record Access. This work will continue at an accelerated pace during 1976-77.

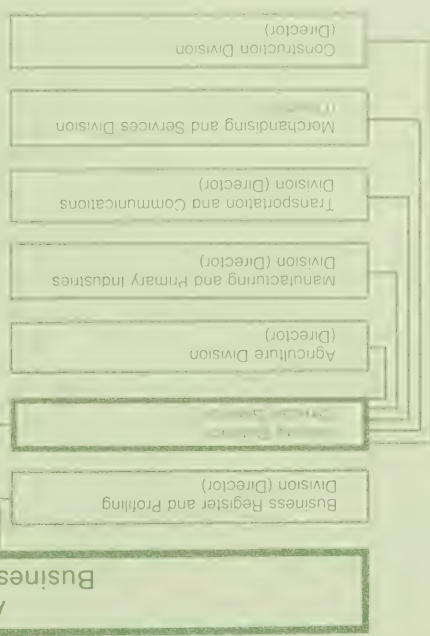
Computer systems were further developed and an interactive interrogation system was undergoing advanced testing at the end of the year. Development work was being carried out for an interactive updating facility to be continued into the next year.

Profiling

Work continued on identifying the statistical reporting structures and the establishment of an ancillary unit structures of major businesses and of the resolution of reporting problems of procedures were developed, tested and implemented for surveys of labour statistics — job and occupational employment — and this activity will be extended in 1976-77.

Tax Record Access

The subdivision continued the work of retrieving data from taxation records to supplement or replace statistical data collected in other ways. All unincorporated businesses with gross sales of over \$50,000 were identified and



classified. The objective is to improve the quality of survey lists and to reduce respondent burden by using tax data to replace mailed questionnaires. The division is required for the 1981 census of merchandising and services without employees which is required for the development of a list of unincorporated businesses and construction industries.

Extensive planning and a certain amount of production work were completed for the development of a list of unincorporated businesses and construction industries.

1981 census of merchandising and services without employees which is required for the development of a list of unincorporated businesses and construction industries.

used to reduce respondent burden significantly. It is again hoped that tax data will be used to reduce respondent burden significantly.

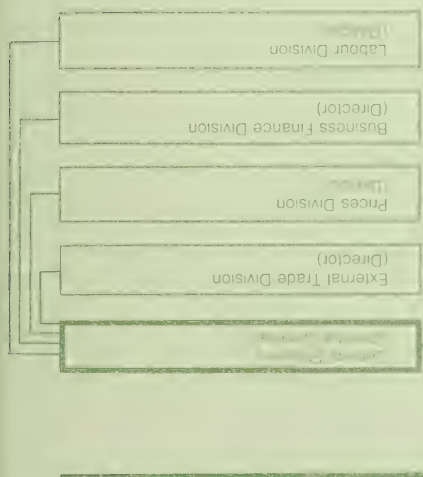
Industry Statistics Branch Agriculture Division

During the year the division planned a pilot farm expenditure survey in western Canada to be conducted during the latter part of 1975-76 and early 1976-77. This survey is a first step in the development of a statistical system to support the Western Grain Stabilization Act. It developed estimates of milk production from information about quantities purchased for conversion to milk equivalent of the various dairy products such as butter and cheese. An

Manufacturing and Primary Industries Division

As a result of recently concluded negotiations in respect of the use of tax data in lieu of direct surveys the division hopes that some

ACS Business Statistics

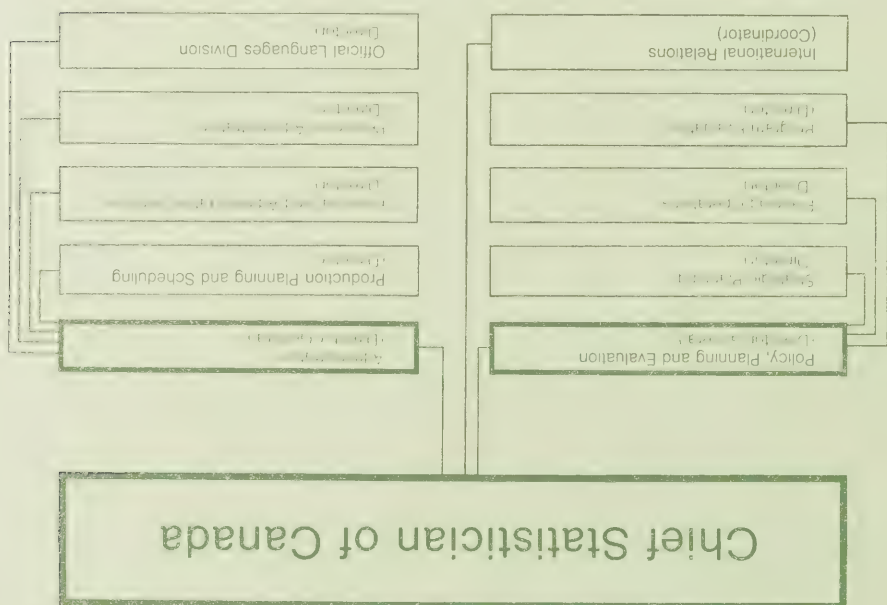


Transportation and Communications Division

The division conducted a pilot study at the Port of Vancouver to test the feasibility of collecting international shipping statistics using customs documents, thus linking trade and in the Atlantic region, analysis of the documentation of a major waterborne carrier, in collaboration with Business Survey Methods and Transport Canada, identified possible alternatives to the regular shipping report. A special survey of the water transport industry was conducted to provide a solid base for future

Major Canadian air carriers were surveyed on fuel consumption and cost for and with the Canadian Transport Commission Motor carrier industry surveys were resumed. Revised estimates for a survey on for-hire trucking were released

released



Policy, Planning and Evaluation Branch

This branch provides a staff service to be Chief Statistician on program planning and evaluation, and advises him on policy issues going beyond the responsibilities of individual fields and branches. Such advice includes allocation of priorities to various programs, setting of departmental objectives, the bureau's role in the national statistical system and its relations with other bodies in this system. There are three divisions under the branch.

Strategic Planning Division

The division co-ordinates the development of objectives by various fields and ensures that the efforts mesh with over-all objectives. It helps develop program plans and advises on their implementation.

Planning Operations Division

This division is responsible for translating plans into specific operational proposals. It runs the main management information system — the Project Review and Cost Accounting System — which measures time and manpower devoted to projects. Immediate and medium-term needs of the bureau are reviewed and co-ordinated regularly to produce the annual program forecast. The division also maintains a registry of all internal and external committee proceedings.

Program Evaluation Division

Assessing the efficiency and effectiveness of all aspects of the bureau's programs is the responsibility of this division. It continued work during 1975-76 on establishment of a system to measure operational performance.

International Relations

Statistics Canada continued its co-operation with statistical units of international organizations of which Canada is a member. This took the form of supplying Canadian data to international organizations and participating in the development of international statistical standards and future work programs. Some of the more significant international statistical meetings in 1975-76 were the eighth Conference of Commonwealth Statisticians, the twenty-third plenary session of the Conference of European Statisticians, the twelfth session of the Committee on Improvement of National Statistics of the Inter-American Statistical Institute and the fourth session of the International Statistical Institute. Statistics Canada actively participated in these meetings and in a number of technical meetings dealing with specific statistical aspects of a variety of subject matters. These meetings provided mutual benefits for all countries represented.

Statistics Canada also continued its bilateral contacts with the statistical agencies of industrial countries.

Equal Opportunities for Women

A committee on equal opportunities for women has been active since the fall of 1974. It is composed of representatives and alternates from each field, reporting to the Chief Statistician. Since January 1975 *Action*, an in-house one-page paper, has been issued monthly to publicize these activities.

At the end of June 1975, a program was made available to all Statistics Canada women employees in the Ottawa region, consisting of a slide presentation called *It's Up to You* and

discussion about available training, both in-house and elsewhere. In March 1976, a policy statement was issued by the Chief Statistician announcing the formation of a management committee to initiate further action to promote equal opportunities for women and to develop both a one-year action plan and a five-year action plan. The plan will include targets to be met and methods of monitoring progress.

The Honourable Don Jamieson
Minister of Industry, Trade and Commerce,
Ottawa, Ontario.

Sir:
It is with pleasure that I submit to you the
Annual Report of Statistics Canada covering
the operations and services during the fiscal
year ended March 31, 1976.
Respectfully submitted,

Peter G. Kirkham
Chief Statistician of Canada

Consumer Income and Expenditure
Special Surveys Co-ordination Division

12 Institutions and Public Finance Branch

Public Finance Division

Education, Science and Culture Division

Health Division

Justice Statistics Division

13 Statistical Services

Household Surveys Development Staff

Business Survey Methods Division

Institutional and Agriculture Survey Methods Division

Census Survey Methods Division

Field Division

14 Systems and Data Processing Branch

Systems Development Division

Data Processing Division

General Survey Systems Division

Automation Research, Planning and Audit Division

15 Marketing Services Field

Information Division

User Advisory Services Division

Statistics Canada Library

16 Census

Population Studies and Statistics Division

User Relations

Content and Analysis Branch

Long-range Planning Group

Population Estimates and Projection Division

Census Characteristics Division

Census of Agriculture Division

17 Production Branch

Data Capture Division

Data Dissemination Division

Census Processing Division

Table of Contents

5	Policy, Planning and Evaluation Branch	Strategic Planning Division Planning Operations Division Program Evaluation Division International Relations
6	Business Statistics	Business Register and Profiling Division
7	Industry Statistics Branch	Agriculture Division Manufacturing and Primary Industries Division Transportation and Communications Division Merchandising and Services Division Construction Division
	General Statistics Branch	External Trade Division Prices Division Business Finance Division Labour Division
9	Economic Accounts and Integration	Co-ordinator, Financial Statistics Senior Adviser on Integration
	System of National Accounts (Structural)	Input-Output Division Regional and Urban Research and Development Division
10	System of National Accounts (Current)	Gross National Products Division Balance of Payments Division Industry Product Division Financial Flows and Multinational Enterprises Current Economic Analysis Division
11	Household and Institutional Statistics	
	Household Statistics Branch	Labour Force Survey Division

Statistics Canada
Annual Report
1975-1976

For the fiscal year ended March 31

1-0000-502
Catalogue 11-201
Statistics Canada
Ottawa

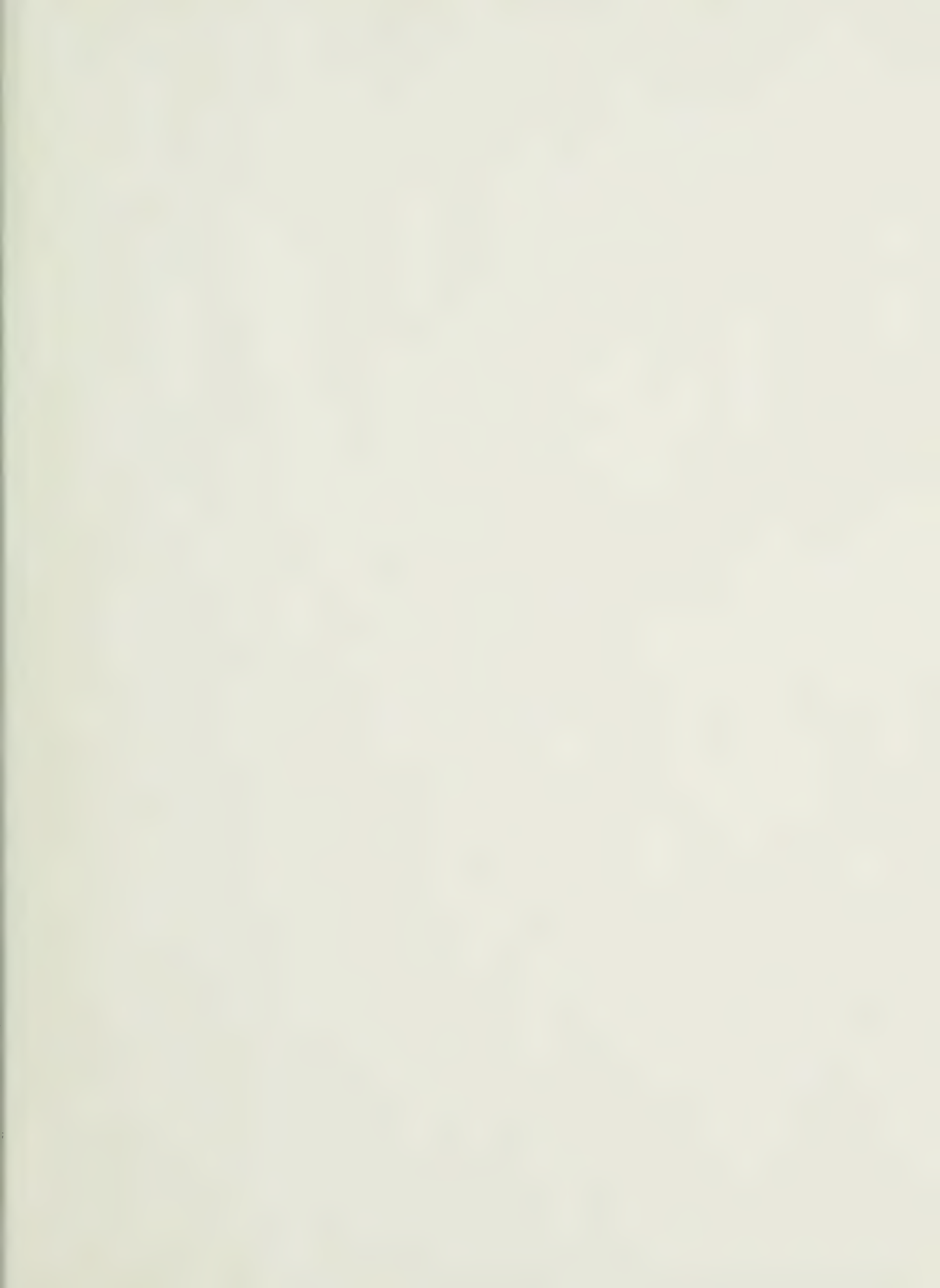


Statistics Canada Annual Report 1975-1976

Statistics
Canada

Statistique
Canada





Government
Publications

BINDING SECT. NOV 23 1977

Government
Publications

